

Rebuttal Expert Witness Report

of

Stephen M. Snyder

Submitted On Behalf Of

Asbestos Creditors Committee

In Re: W. R. Grace

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TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION: SCOPE, SUMMARY and APPROACH	1
A. Scope.....	1
B. Summary of Conclusions	1
C. Approach: Grounded In The Tort System As It Operated	3
II. APPLICATION OF THE CLAIMS VALUATION ASSUMPTIONS PROVIDED TO GRACE'S EVALUATION EXPERT WOULD UNDERSTATE GRACE'S LIABILITIES AS DETERMINED BY REFERENCE TO ACTUAL AND, I BELIEVE, RELIABLE RESULTS ACHIEVED IN THE TORT SYSTEM	4
A. Asbestos Settlement Values Are Based On Trial Results, An Enormous Store of Claim Valuation Information, And An Understanding Of How Substantive And Procedural Law Affects Values	5
B. The Common Store Of Information Available In The Asbestos Litigation Allows Experienced Negotiators To Settle Claims Effectively Based On Limited Plaintiff Specific Information In Individual Files	9
C. The Medical and Technical Positions Taken By Grace's Experts Are Statements Of Controverted Opinion Repeatedly Evaluated By Juries Whose Decisions On These Disputes Inform The Settlement Process	11
1. Compensability of Non-Malignant and "Unimpaired" Claims	14
2. "Restrictive" versus "Obstructive" Disease	18
3. Levels of Exposure to Asbestos	18
4. Epidemiology in the Asbestos Litigation	23
5. Attribution of Malignancy To Asbestos	25
D. Imposing the Grace-Prescribed Criteria Would Tend to Understate Grace's Tort System Asbestos Liabilities	25
1. The Criteria Would Exclude Many Non-Malignant Claims – Especially Pleural Injury Cases	26
2. The Criteria Establish Minimum Impairment Standards For Asbestosis Which Do Not Reflect Tort System Rules And Which Would Exclude Or Undervalue Asbestosis Claims Routinely Compensated In The Tort System	26

	<u>Page</u>
3. ARPC were told to assume that the only "valid" claims were those brought by workers who personally mixed or personally installed Grace products.	27
4. The Lung Cancer Causation Criteria Would Exclude Cases Which Are Compensated In The Tort System.....	27
5. The Criteria Would Exclude "Other" Cancers Compensated In the Tort System.....	27
III. GRACE LEVERAGED ITS PERIPHERAL DEFENDANT STATUS TO ACHIEVE REASONABLE SETTLEMENTS	28
A. Grace Was A Peripheral Defendant With Target Defendant Potential	29
B. The Front Line Defendants Confronted The Major Core Issues In The Litigation Through The 1990s, Allowing Others Like Grace To Collect And Use Valuable Settlement Related Intelligence Generated By Their Efforts.....	31
C. The Grace Claims History Shows It Tried And Settled Cases Effectively Within Tort System Constraints	44
1. Grace had capable and knowledgeable litigation managers and was well-organized and supported to manage its defense.	44
2. Grace effectively executed a strategy to contain defense costs and preserve low average settlement values.....	46
3. Grace had the option to, and it did, try cases, but its trials were fewer in number than front line defendants and usually occurred in connection with Grace's settlement objectives.	55
IV. TORT REFORM IN SOME STATES HAS NOT TURNED THE TIDE IN THE NATIONAL ASBESTOS LITIGATION	60
V. INDIVIDUAL CLAIMS FILES DO NOT SUMMARIZE ALL AVAILABLE EVIDENCE; HIGH COSTS AND INFORMATION OVERLOAD HAVE CAUSED THE PARTIES TO LIMIT THE INFORMATION RETAINED IN INDIVIDUAL CLAIM FILES	63
VI. CONCLUSION.....	67

TABLE OF AUTHORITIESCases

	<u>Page</u>
<i>3M Co. v. Johnson,</i> 895 So.2d 151 (Miss. 2005).....	44
<i>3M Co. v. Johnson,</i> 926 So.2d 860 (Miss. 2006).....	44
<i>Abadie v. Metropolitan Life Ins. Co.,</i> 784 So.2d 46 (La.App. 5th 2001).....	(Ex. C - 5, 6)
<i>AcandS v. Abate,</i> 710 A.2d 944 (Ct. Spec. App. Md. 1998).....	43, (Ex. C - 7)
<i>ACandS, Inc. v. Godwin,</i> 667 A.2d 116 (Md. 1995).....	(Ex. C - 6)
<i>Anderson v. A.C.& S., Inc.,</i> 797 N.E.2d 537 (Ohio App. 2003).....	(Ex. B - 3)
<i>Appalachian Power Co. v. MacQueen,</i> 479 S.E.2d 300 (W. Va. 1996).....	43
<i>Asbestos v. Bordelon, Inc.,</i> 726 So.2d 926 (La. App. 1998).....	15
<i>Berger v. Amchem Products,</i> 13 Misc.3d 335 (N.Y. Sup. 2006).....	24
<i>Bickham v. Metropolitan Life Ins. Co.,</i> 764 So.2d 345 (La. App. 1st 2000).....	(Ex. C - 4)
<i>Blair v. Eagle-Picher Industries, Inc.,</i> 962 F.2d 1492 (10th Cir. 1992).....	(Ex. B - 3)
<i>Borel v. Fibreboard Corporation,</i> 493 F.2d 1076, 1094 (5th Cir. 1973), cert. den. <i>Fibreboard Paper Products Corp. v. Borel</i> , 419 U.S. 869 (1974).....	18
<i>Bradley v. A.C. & S. Co., Inc.,</i> 1990 WL 123017 (Del. Super. 1990).....	17
<i>Brennan v. Owens-Corning Fiberglas Corp.,</i> 10 P.3d 749 (Idaho 2000).....	(Ex. B - 3)
<i>Cadlo v. Metalclad Insulation Corporation,</i> 2007 WL 1666660 at *14 (Cal. App. 1 Dist. 2007).....	21

	<u>Page</u>
<i>Chapin v. A & L Parts, Inc.,</i> 732 N.W.2d 578 (Ct. App. Mich. 2007).....	24
<i>Chism v. W. R. Grace & Co.,</i> 158 F.3d 988 (8th Cir. 1998).....	20
<i>Cimino v. Raymark Industries, Inc.,</i> 151 F.3d 297 (5 th Cir. 1998).....(Ex. C - 3, 6, 7)	
<i>City of Greenville v. W. R. Grace & Co.,</i> 640 F. Supp. 559 (D. S. Car. 1986).....	30
<i>City of Greenville v. W. R. Grace,</i> 827 F.2d 975 (4th Cir. 1987), rehearing denied, 840 F.2d 219 (4th Cir. 1988).....	22, 24
<i>Clayton Center Associates v. W. R. Grace & Co.,</i> 861 S.W.2d 686 (1993).....	22, 30
<i>Corporation of Mercer University v. National Gypsum Co.,</i> 877 F.2d 35 (11th Cir. 1989).....	30
<i>Eagle-Picher Industries, Inc. v. Balbos,</i> 326 Md. 179, 604 A.2d 445 (1992).....	21
<i>Finstad v. W. R. Grace & Co.,</i> 8 P.3d 778 (Mont. 2000).....	12
<i>Gatling v. Eaton Corp.,</i> 807 A.2d 283, 288 (Pa. Super 2002).....	15
<i>Georgia-Pacific Corp. v. Pransky,</i> 369 Md. 360, 800 A.2d 722 (2002)	21
<i>Gutierrez v. Cassiar Min. Corp.,</i> 64 Cal. App. 4th 148 (1998).....	16
<i>Harashe v. Flintkote Co.,</i> 848 S.W.2d 506 (Mo. Ct. App. 1993).....	19, 20
<i>Hedgecorth v. Union Pacific R. Co.,</i> 210 S.W.3d 220 (Mo. App. E. D. 2006)	22
<i>Howell v. Celotex Corp.,</i> 904 F.2d 3 (3d Cir. 1990).....	17
<i>Huber v. Taylor,</i> 469 F. 3d 67 (3d Cir. 2006).....	44
<i>In re Asbestos Litigation,</i> 911 A.2d 1176 (Sup. Ct. Newcastle Co., Del. 2006).....	22, 24

	<u>Page</u>
<i>In re Asbestos Products Liability Litigation (No. VI)</i> 771 F.Supp 415 (Jud. Pan. Mult. Lit. 1991)	42
<i>In re Asbestos v. Bordelon, Inc.</i> , 726 So.2d 926 (La. App. 4th 1998).....	(Ex. C - 4)
<i>In re Brooklyn Navy Yard Asbestos Litigation</i> , 971 F.2d 831, 836 (2d Cir. 1992).....	(Ex. C - 1)
<i>In re Ethyl Corp.</i> , 975 S.W.2d 606 (Tex. 1998).....	(Ex. C - 4)
<i>In re Joint Eastern & Southern Dist. Asbestos Litigation</i> , 1990 WL 4772 (S.D.N.Y. Jan. 16, 1990) (Sweet, D.J.).....	(Ex. C - 1)
<i>In re Joint Eastern & Southern District Asbestos Litigation</i> , 52 F.3d 1124 (2d Cir. 1995).....	27
<i>In re Joint Eastern & Southern Districts Asbestos Litigation</i> , 772 F. Supp. 1380 (E. & S.D.N.Y. 1991), aff'd in part and reversed in part <i>In re Brooklyn Navy Yard Asbestos Litigation</i> , 971 F.2d 831 (2d Cir. 1992).....	(Ex. C - 1)
<i>In re Joint Eastern and Southern Districts Asbestos Litigation</i> , 125 F.R.D. 60 (E.D.N.Y. 1989)	(Ex. C - 1)
<i>In re N. Ohio Tireworkers</i> , 634 N.E.2d 249 (Ohio App. 1993).....	(Ex. B - 3)
<i>In re New York Asbestos Litigation</i> , 145 F.R.D. 644, 652-53 (S.D.N.Y. 1993).....	(Ex. C - 1)
<i>In re New York Asbestos Litigation</i> , 149 F.R.D. 490 (S.D.N.Y. 1993).....	(Ex. C - 2)
<i>In re Silica Products Liability Litigation</i> , 398 F. Supp.2d 563 (S.D. Tex. 2005).....	(Ex. B - 4)
<i>In re Tire Workers Asbestos Litigation</i> , 1991 WL 195557 (E. D. Pa. 1991).....	(Ex. B - 3)
<i>In re Tobacco Litigation</i> , 624 S.E.2d 738 (W. Va. 2005).....	(Ex. C - 3)
<i>Jenkins v. Raymark Industries, Inc.</i> , 109 F.R.D. 296 (E.D. Tex 1985)	40
<i>Jenkins v. Raymark Industries, Inc.</i> , 782 F.2d 468 (5th Cir. 1986).....	41, 43, (Ex. C - 1)

	<u>Page</u>
<i>Kershaw v. Celotex Corp.,</i> 1989 WL 817174 (Ct. Comm. Pleas Phila. 1989)	17
<i>Lockwood v. A.C. & S., Inc.,</i> 722 P.2d 826 (Wash. App. 1986).....	15
<i>Malcolm v. National Gypsum Co.,</i> 995 F.2d 346 (2d Cir. 1993).....	(Ex. C - 2)
<i>Mancari v. A.C.& S., Inc.,</i> 670 A.2d 1339 (Del. 1995).....	15
<i>Marinari v. Asbestos Corp.,</i> 417 Pa. Super. 440, 612 A.2d 1021 (1993)	37
<i>Mauro v. Raymark Industries, Inc.,</i> 561 A.2d 257, 259 (N.J. 1989).....	15
<i>Neal v. Carey Canadian Mines, Inc.,</i> 548 F. Supp. 357 (E. D. Pa. 1982), aff'd 760 F.2d 481 (3d Cir. 1985).....	(Ex. C - 1)
<i>Norfolk & Western R. Co. v. Ayers,</i> 538 U.S. 135 (2003)	16
<i>Ortiz v. Fibreboard Corporation,</i> 527 U.S. 815, 119 S. Ct. 2295 (1999).....	3
<i>Owens-Corning Fiberglas Corp. v. Garrett,</i> 343 Md. 500, 526-30, 682 A.2d 1143 (1996).....	21
<i>Owens-Corning Fiberglas Corporation v. Martin,</i> 942 S.W.2d 712 (Tex. 1997).....	(Ex. C - 4)
<i>Owens-Illinois, Inc. v. Hunter,</i> 875 A.2d 157 (Ct. Spec. App. Md. 2005).....	21
<i>Paz v. Brush Engineered Materials, Inc.,</i> 949 So.2d 1 (Miss. 2007).....	16
<i>Pustejosky v. Rapid American Corp.,</i> 35 S.W. 3d 643 (Tex. 2000).....	37
<i>Raymark Industries, Inc. v. Stemple,</i> 1991 WL 100820 (D. Kan. 1991)	31, 38 (Ex. B - 2)
<i>Rutherford v. Owens-Illinois, Inc.,</i> 16 Cal.4th 953, 961 (1997).....	20, 21

	<u>Page</u>
<i>Sheppard v. AC&S, Inc.,</i> 2005 WL 1433875, 39 Conn. L. Rptr. 384 (2005).....	37
<i>Slaughter v. Southern Talc Co.,</i> 919 F.2d 304 (5th Cir. 1990).....	(Ex. B - 2)
<i>Srite v. Owens-Illinois,</i> 870 S.W.2d 556 (Tex.App.Hous. (1 Dist.) 1993)	(Ex. C - 5)
<i>State ex rel. Allman v. MacQueen,</i> 551 S.E.2d 369, 371 (W.Va. 2001).....	(Ex. C - 3)
<i>State ex rel. Appalachian Power Co. v. MacQueen,</i> 479 S.E.2d 300, 303-305 (W.Va. 1996).....	(Ex. C - 2, 3)
<i>State Farm Mut. Auto. Ins. Co. v. W.R. Grace & Co.,</i> 834 F. Supp. 1046 (C.D. Ill. 1992)	30
<i>T.H.S. Northstar Associates v. W.R. Grace & Company - Conn.,</i> 860 F. Supp. 640 (D. Minn. 1994).....	30
<i>W. R. Grace v. Pyke,</i> 661 So.2d 1301 (D. Ct. App. Fl. 1995).....	15
<i>Wyatt v. A-Best, Co., Inc.,</i> 910 S.W.2d 851 (Tenn. 1995)	(Ex. B - 3)

Statutes, Rules and Regulations

145 F.R.D.....	(Ex. C - 2)
Cal. Code Civ. Proc. § 340.2.....	38
Restatement (Second) of Torts. § 456 (1963-1964).....	15, 16

Other Authorities

H.R. 1737 108 th Cong. 2003.....	43
S. 1125, 108 th Cong. (2003).....	61
S. 852, 109 th Cong. 2005	43
1945: Fleischer, Viles, Gade and Drinker, <u>A Health Survey of Pipe-Covering Operations in Constructing Naval Vessels</u> , 28 J. Indus. Hyg. 9-16)	38

Page

<u>Asbestos cases continue to drop in Madison County,</u> The Madison St. Clair Record, July 7, 2006	60
<u>Judges not worried about Madison County asbestos upsurge</u> The Madison St. Clair Record, July 26, 2007	61
<u>Barnaby J. Feder, Finding a Lifeboat in a Flood of Litigation,</u> NEW YORK TIMES, July 4, 1993	33, 51
<u>Consensus Report, "Asbestos, Asbestosis and Cancer: The Helsinki Criteria For Diagnosis And Attribution,</u> Scand. J. Work & Environ. Health (1997)	25
<u>Francis E. McGovern, Resolving Mature Mass Tort Litigation,</u> 69 B.U. L. REV. 659, 689-94 (1989).....	5, 63
<u>Francis E. McGovern, The Defensive Use of Federal Class Actions in Mass Torts,</u> 39 ARIZ. L. REV. 595, 607 (1997).....	63
<u>Hanlon and Smetak, Asbestos Changes, NYU Survey of American Law,</u> 62 NYU L.Rev. 525, 580 <i>et. seq.</i> (2007).....	60
<u>Report of the Judicial Conference Ad Hoc Committee on Asbestos Litigation</u> (March 1991).....	17, 37, 42, 43
<u>Stephen Tarnoff, New Avalanche of Asbestos Claims Hits,</u> BUSINESS INSURANCE, May 25, 198.....	32
<u>Susan Koniak, Feasting While the Widow Weeps: Georgine v. Amchem Products,</u> 80 Cornell L. Rev. 1045, 1053-57, <i>et seq.</i> (1995).....	34

I. INTRODUCTION: SCOPE, SUMMARY and APPROACH

A. Scope

This rebuttal report addresses conclusions and opinions presented by experts who submitted reports on behalf of W.R. Grace ("Grace")¹ with respect to valuation of asbestos claims in the tort system, especially relating to how that system has resolved asbestos liabilities in the past, how, if at all, it would resolve those liabilities differently in the future, and how Grace liabilities would have been resolved if it had remained as an active defendant subject to the tort system.

B. Summary of Conclusions

CONCLUSIONS

In summary, the conclusions I reach in this report are:

1. The bright line claims elimination criteria Grace gave to ARPC exclude claims that are compensated in the asbestos tort system. These criteria are the defense version of old technical/ medical disputes that for decades asbestos courts have treated mainly as questions of fact for juries. Those juries often assign value to claims these criteria would categorically exclude. Any estimation of claims applying these criteria to eliminate claims will underestimate the number and value of asbestos claims against Grace. Given current circumstances, the only defensible assumption to make to inform projections of the sort ARPC customarily provides is that the future will continue the trends of the past, albeit with some modest room for adjustments – up and down -- at the margins to account for new developments.
2. The litigation that has resolved asbestos claims for the last 40 years has been extensive and robust resolving hundreds of thousands of cases in state and federal courts. The cases have resulted in thousands of individual and small group jury trials. All sides have been forcefully represented and have had substantial influence over outcomes in the litigation.
3. As a "peripheral" defendant in the 1980's and 1990's Grace had opportunities not available to all defendants to settle claims early and inexpensively, avoid major trial liabilities and control its costs, leaving it to other, more significant defendants to bear the brunt of the litigation.
4. Because of the nature and distribution of Grace's products and the strength of the corporate conduct/liability case that had been proved against it, Grace had

¹ The reports are listed on Exhibit A.

potential to become a more prominent defendant in the litigation as other defendants failed. That potential was not realized because of Grace's bankruptcy filing.

5. Through the decade of the 1990's, prominent front line defendants spent hundreds of millions of dollars in hundreds of individual and small consolidated trials testing the validity of claims defendants believed should not have value in the tort system or that arose in questionable circumstances, viz: marginal impairment/no disability claims, claims alleging low exposure or having questionable product identification, waves of new filings produced by worker health screenings employing controversial diagnostic practices, and claims that had migrated across jurisdictional lines into large scale trial aggregations.

6. From its own, more modest, trial activities and the intense activities of the front line defendants in the 1990's, Grace was informed at moderate cost and risk that:

- most trial courts viewed the issues arising repeatedly in the more controversial, "marginal" or "no impairment" types of claims to be questions of fact to be decided by juries,
- juries returned verdicts for plaintiffs, sometimes in substantial amounts, in these types of cases often enough such that these claims had value in settlements as well as at trial,
- the resources of the front line defendants rapidly were being consumed by mounting liabilities – totaling billions of dollars – generated by their unsuccessful trial activity, and
- the increased level of trial activity itself was attracting more and more controversial claims.

All of this educated Grace about the settlement and trial value of classes of claims in different places and allowed Grace to develop strategies best suited to defer its own increase in stature in the litigation and preserve its best hopes for surviving the expansion of the litigation.

7. Grace was effectively represented in its defense of asbestos claims throughout the 1990's. Grace's defense managers made good use of the information they obtained from their own trials and the results of efforts of others by negotiating group settlements on favorable terms.

8. Imminent passage of comprehensive national tort reform that would have eliminated asbestos cases from the tort system altogether explains the decrease in asbestos claims filings after 2003. Clarification, finally, in 2006 that national tort reform would not eliminate the litigation altogether, plus the inertial velocity of the litigation and the persistence and ingenuity in overcoming obstacles that the plaintiffs'

bar has demonstrated over the decades, explains why filings in all categories will reemerge notwithstanding tort reform in some states.

9. A review of a sample of individual asbestos claims or settlement files will not provide a complete picture of the quality or merit of those claims. Neither plaintiffs nor defendants prepare or maintain comprehensive or complete information in such files while claims are *in process* short of trial. They collect enough information to assign each claim to its category and leave it to the occasional trial to prepare an individual claim comprehensively to test the validity of classes of claims and to adjust settlement values over time. Asbestos claims, sometimes large groups of them, are evaluated by reference mainly to commonly and centrally held stores of information about liability, exposure or medical facts and trial and settlement experience. This is possible because the asbestos litigation is a "mature" tort where all sides have access to wealth of information about cases and their values that has enabled them to evaluate and settle claims in large groups based on standardized, average case profiles well in advance of trial. Litigation of this scale could not resolve claims without the ability to treat cases in groups and without avoiding the crushing cost burden of the need to prepare each case in detail.

C. Approach: Grounded In The Tort System As It Operated

My perspective is mainly a practical one and is based on widely available information I acquired through having been a participant in the litigation in a variety of capacities – defense lawyer for many asbestos defendants, national counsel for significant defendants (Fibreboard and, after 1996, Owens Corning), co-architect of one of the early global class action settlement attempts,² counsel to asbestos defendants who have sought and obtained resolution of their asbestos liabilities through bankruptcy, insurance coverage counsel for a number of asbestos defendants, and trustee of two trusts established under section 524(g) of the bankruptcy code.

Thus, for example, while Grace experts prescribe criteria by which Grace asserts a court or asbestos trust should evaluate claims against Grace, this report seeks to explain how the system has in fact valued them.

The Grace expert reports conclude that the tort system improperly ignored criteria Grace would prescribe and, as a result, improperly assigned value to a wide spectrum of claims, especially so-called non-impaired, non-malignant claims that should not have been assigned any value. This report describes how these categories of claims have been valued, sometimes richly, in the tort system and will continue to retain value in any system applying traditional tort rules and procedures.

² *Ortiz v. Fibreboard Corporation*, 527 U.S. 815, 119 S. Ct. 2295 (1999).

The Grace expert reports do not discuss individual jury trial results in any detail. This report describes:

- i) How asbestos negotiators, adversaries with access to a wealth of information from an enormous number and variety of individualized trials and decades of discovery and investigation, used these trial results and other available data to assign values to cases that reflected actual tort system risks of liability;
 - ii) How Grace's managers used Grace's peripheral defendant status to negotiate settlements that kept its costs low, preserved low settlement averages for use in a later global settlement or other valuation process, and effectively protected Grace from the much greater asbestos litigation challenges then confronting the front line asbestos defendants;
 - iii) Why I conclude that this strategy was not forced on Grace but was the correct choice for Grace, one fortunately available to it because other "target" defendants in this period were spending fortunes conducting defenses that absorbed the attentions of the plaintiffs' bar in the course of *unsuccessful* defense efforts to remake the litigation into what the Grace expert reports now say it has become.
- II. APPLICATION OF THE CLAIMS VALUATION ASSUMPTIONS PROVIDED TO GRACE'S EVALUATION EXPERT WOULD UNDERSTATE GRACE'S LIABILITIES AS DETERMINED BY REFERENCE TO ACTUAL AND, I BELIEVE, RELIABLE RESULTS ACHIEVED IN THE TORT SYSTEM**

The criteria employed by Grace and given to Dr. Florence of ARPC for estimation purposes represent a traditional defense view of medical-legal issues which are still contested on a regular basis in asbestos courts across the country. In the main, they have been rejected by courts as categorical legal criteria and sent to juries as opinion evidence to be weighed and accepted or rejected in deciding individual cases. Juries sometimes have accepted these criteria for decision making in particular cases, but also quite often have rejected and have accepted contrary plaintiff presentations such as those laid out in the reports of the ACC's medical and legal expert.

Adoption of the Grace criteria therefore would supplant tort system outcomes with categorical defense criteria on issues the tort system has dealt with regularly over the years and consistently leaves to jury resolution. Any estimation built on these criteria would fail to credit claims routinely deemed valid by the courts and juries. Peremptory implementation of these criteria to adjudicate classes of claims would ignore individual claims characteristics that even the mass trial structures Grace criticized remained sensitive to.

A. Asbestos Settlement Values Are Based On Trial Results, An Enormous Store of Claim Valuation Information, And An Understanding Of How Substantive And Procedural Law Affects Values

Like all litigation settlements, asbestos settlements are compromises where the parties manage risk by accepting less than they might achieve at trial. In asbestos cases settling defendants – especially peripheral defendants – often pay only a very small fraction in settlement of what they might be forced to pay at trial. Lawyers for asbestos defendants earn their pay by keeping that fraction as small as possible, hopefully at minimum cost to their client. They cannot do this, of course, without an understanding of likely outcomes at trial. But to negotiate from the estimated trial exposure number to an optimal, hopefully much smaller, settlement number, the defense lawyer must command an understanding of volumes of information – much of which is not case specific – that can affect the client's liability and the liability of the large number (sometimes dozens) of its co-defendants. In the asbestos litigation this information is remarkably extensive and very accessible. Jury verdict results from numerous trials of *individual* asbestos cases in state and federal courts across the country are the heart of this information.

Asbestos is the quintessential "mature tort."³ No litigation before it has even remotely approached this litigation in its size, its longevity, the wealth of information it has provided its managers, and the depth of experience and level of sophistication of those managers. It has generated an immense amount of data to assist those making decisions about the value of cases. The information available to a personal injury lawyer in, e.g., Sacramento, California to estimate the value of a traumatic amputation industrial injury case is nothing compared the information asbestos lawyers and litigation risk managers have accumulated to estimate the value of any given asbestos case.

The wealth of this data and depth of experience is such that based on a few, relatively easy to ascertain facts in any case or large group of cases (e.g., disease type, plaintiff's age or decedent's age at death, job type or trade and location, identity and location of the court, trial date, and the identities of the opposition counsel) values can be estimated for settlement purposes.

It would be naïve for any lawyer in this information-rich environment to risk a client's interests by rigidly applying a view of what those claims "should" be worth that departs materially from the guidelines provided by trial and prior settlement results. The litigation provides notable examples of defendants that have tried and failed to

³ Francis E. McGovern, Resolving Mature Mass Tort Litigation, 69 B.U. L. REV. 659, 689-94 (1989).

enforce settlement values that departed from these norms because they reflected a company's unique and inward looking view of what settlement values should be.

The claims estimators who testify in asbestos bankruptcy cases can run thousands of computer simulations of the variables in their estimation models to determine variability and frequency of different results. The asbestos litigation, as huge as it is, provides its claims managers its own version of this iterative process in the form of jury verdict results from repeated trials of the very same issues. Those issues are not decided just once – they are tried over and over again – and as results have multiplied they have clarified the range and frequency of likely outcomes.

Asbestos trials constantly and repeatedly address issues such as:

Liability – was the defendant negligent, were its products defective, did it fail to warn adequately? Generally, there has been no single answer to the liability question. It normally is determined on case specific facts on a case by case basis.

Injury – are symptoms and health effects experienced by the plaintiff caused by asbestos? Were pleural changes caused by asbestos or something else? Was the plaintiff's cancer caused by asbestos? Was a mesothelioma caused by exposure to asbestos or was it "spontaneous" or "idiopathic"? The tort system requires a plaintiff to prove he/she was "injured." Juries in individual cases have found that "injury" has occurred even though the proof does not demonstrate the disease fits conventional definitions such as "asbestosis."

Legal causation – was a breach of duty (negligence, failure to warn, a product defect) a legal cause of injury? Did the plaintiff experience "enough" exposure to a defendant's products under governing law?

Damages – Were medical expenses caused by asbestos injury or something else? Was time lost from work due to asbestos injury or by non-asbestos health effects? What amount should be awarded on account of fear, anxiety, worry, emotional suffering and the like caused by the defendant's negligence or other breach of duty?

Thousands of verdicts have been returned in cases presenting the different circumstances defendants see time and time again: in pro-defendant jurisdictions, in pro-plaintiff jurisdictions; against defendants with favorable liability facts, against those with poor, even aggravated, liability facts; on negligence theories, based on failure to warn doctrines, under strict liability instructions – the list goes on. All types of disease processes have been represented: impaired, non-impaired, mere pleural changes, "pleural asbestosis", cured lung cancer, terminal mesothelioma, etc. Plaintiffs are young, old, middle aged. Defendants can be seen as "front line" or "peripheral." Asbestos exposures tried to juries have been light or heavy, brief or repetitive and

extended; "product identification" has been strong or weak. The cases are tried under governing state or federal substantive law and they are tried under procedural rules which vary from jurisdiction to jurisdiction. This has gone on for more than 40 years and the results are expressed in stark monetary terms. These trials – largely individual, often in small group consolidations and only occasionally in "mass" proceedings – have resulted in verdicts which have assigned values from hundreds to many millions of dollars to cases of all types.

The information available to negotiators, including those who settled the Grace cases, includes more than just raw jury verdicts.

Enormous volumes of discovery have been done on every aspect of an asbestos case – liability facts, support for defenses, contested medical issues, product characteristics, job or work site conditions. Positions of individual experts who have testified time after time have been repeatedly set out and have been exhaustively probed in depositions. Factual investigations have unearthed warehouses of historic information. The voluminous medical and scientific literature has been combed and re-combed and used over and over in case after case as support for positions or as fodder for cross examination.

The sufficiency of evidence to support various claims and positions has been repeatedly submitted to judges for decision. Trial courts have reviewed the results and made decisions based on them and appellate courts have reviewed the trial courts. Legal theories have evolved and have matriculated through the reviewing courts. Novel procedures have been employed, tested on appeal, and have been accepted or rejected. Their application to the fact patterns of specific cases is well known by the participants in this system.

How asbestos courts apply various substantive state law tort rules has a major impact on the settlement process. For example, the tort system by and large imposes joint and several liability. Joint and several liability empowers a plaintiffs' lawyer to make a selected defendant the "target" and to emphasize evidence (e.g., on liability or on product exposure) to highlight that defendant. Better for a defendant who can settle early than to be left in the case at trial as a "target." Joint and several liability also has meant that asbestos bankruptcies have increased the effective verdict (or settlement) "shares" of the remaining defendants. Joint and several liability rules also go far to explain how "peripheral" defendants become significant "target" defendants. Joint and several liability has exerted a powerful upward pressure on settlement "share" as front line asbestos defendants have sunk into bankruptcy.

The Grace expert reports emphasize how rules of procedure and court docket management practices affect settlement values. (E.g., Expert Report of Frederick C. Dunbar ("Dunbar Report") at pp. 47-48, citing White, "Explaining the Flood of Asbestos Litigation: Consolidation, Bifurcation and Bouquet Trials".) Understanding how and why Courts have been generally receptive to proposals to break asbestos docket log jams and which alternative proposals have found favor with judges in different locales

and in different eras is also part of the data these sophisticated case managers have mastered.

All sides in the asbestos litigation learned long ago, for example, how manipulating the structure and/or timing of trials could impact case values. And all sides have applied that learning in settlement and to influence courts.

Thus, the conclusion of Dr. Dunbar that case values increase as trial dates approach (Dunbar Report at p. 48) is but an extension of the more fundamental truism that settlement values move in the direction of likely trial outcomes as trial dates approach. Every judge with a settlement docket knows that it is hard to settle cases unless the parties face realistic trial dates. Settlement values will increase for a defendant as trial approaches only if the expected outcome at trial is substantially worse than that currently being discussed in settlement. For a “peripheral” (i.e., not a “target”) asbestos defendant, this almost always will be the case because of the very small shares – compared to verdict outcomes – they customarily pay in settlement. On the other hand, where calendar congestion becomes extreme, settlement values can plummet as plaintiffs despair whether they ever will have access to a jury trial department.

Trial structure also affects settlement values. A defendant that has obtained an early reverse bifurcation order to its liking will find itself in a better position to obtain a favorable settlement as the date for trial approaches. A well-informed defendant facing a trial bifurcation structured against its interests will understand how to factor that negative into its settlement negotiations. Some courts have experimented with trial structures adjudicating large groups of cases on the limited, assertedly “common,” issue of liability as a means to move cases off dockets and encourage settlements. Defendants, such as those which had suffered multiple punitive damages verdicts in the past, which considered themselves vulnerable at trial on liability could anticipate with fair accuracy – and make adjustments, perhaps through early settlements -- how such a structure would affect settlement negotiations as the special issue trial date approached.

Asbestos case managers use all of this information in a very active market – constrained by tort system rules and informed by a constant flow of trial results – that has set and adjusted asbestos settlement values for many years. Given just the barest case outline in an individual case an experienced defense litigation manager knows a great deal about a client’s chances of winning or losing at trial on any given issue or in any given case. Asbestos settlement discussions incorporate this information to identify “comparables” and negotiate discounts or premiums and explicitly or implicitly key off of commonly held and understood data in ways that would be totally unintelligible to the uninitiated.

Although the absolute number of asbestos cases has staggered the American legal system, the vast majority are settled. Settlements themselves are a key indicator of claim values. While trial of individual asbestos claims is notoriously wasteful,

settlement processes have created a very efficient market for valuing claims – precisely because anyone with an understanding of the substantive law and willing to study the trial results and the archives of evidence can evaluate potential outcomes at trial and make well informed settlement decisions. Those settlements, in turn, become data which parties factor into the next round of talks on comparable cases, and on the round after that, and so on.

Although this system has resolved hundreds of thousands of multi-party claims it nevertheless been heavily criticized by every participant constituency – plaintiffs, defendants, lawyers, and courts. But, it bears emphasis, *it is what it is* and it has equipped claims managers, lawyers and settlement judges with an enormous store of information – more than in any other litigation in history – with which to evaluate their cases.

B. The Common Store Of Information Available In The Asbestos Litigation Allows Experienced Negotiators To Settle Claims Effectively Based On Limited Plaintiff Specific Information In Individual Files

Asbestos trial preparation – with the host of technical issues left open for decision in each case – is very expensive. Settlements avoid the costs of trial preparation but require the parties to reach agreement in the absence of full case specific information – including especially the presentation from the other side – that a trial would provide. Early settlements of large groups of cases that multiply those savings are possible in the asbestos litigation because the available historical trial, discovery, and settlement information enables the defense claims managers to handicap and settle claims based on limited individual file information.

Grace's approach to ascertaining whether its products had been identified at a particular location⁴ is typical of how the litigants use centrally held commonly

⁴ The question whether defendants' asbestos products were among those plaintiff was exposed to – so-called "product identification" testimony – has always been a core issue in the asbestos litigation. Companies often rely on sales records, product distribution testimony or testimony about proper or customary use and application of certain products to argue that their products were not present or were present only in amounts that they argued should be considered insignificant. "Co-workers" (not just tradesmen but also teamsters, warehousemen, supply clerks, etc.) have been particularly important plaintiff product identification witnesses. They testify to the products actually used, installed or removed at certain locations at certain times. They explain how contractors regularly borrowed products from other jobs or how distributors or contractors exchanged or took products from other distributors or contractors. Sales or distribution records typically contain gaps (i.e., where sales were to resellers or to inventory and therefore could not be traced to actual jobs) and often did not follow products to their final destinations. Thus, juries typically are left to weigh the eye witness testimony provided by plaintiffs and co-workers against inferences from incomplete sales records or job books provided by defendants.

obtain very favorable price discounts when measured against potential trial outcomes. In the case of a "peripheral" defendant prepared to settle a large group of cases early the discount can be especially deep because it takes into account not only that the defendant might (or even likely will) prevail on certain issues in a significant number of cases, but also that (i) there are other, "target" defendants in the case who can be required to pay more in settlement and (ii) it is unlikely – due to the congested calendar – that the plaintiffs can get access soon to trial courtrooms in a large number of cases where the settling peripheral defendant can be "targeted."

In group settlements of the kind Grace negotiated in the 1990s, early settlement based on informed handicapping of likely trial outcomes and these other considerations allowed peripheral defendants such as Grace (and the plaintiffs) to save considerable litigation expense. It also allowed and even incentivized plaintiffs to continue to look to front line defendants to pay a greater relative share of the total settlement pie. By settling early, peripheral defendants not only could pay much less than their "true" settlement share, they also robbed plaintiffs of incentives to develop or fine tune their case against the settling peripheral defendants and, in effect, underwrote plaintiffs continuing pursuit of historic, front line defendants.

Experienced asbestos settlement negotiators know how these factors – likelihood of "product identification", probable trial results, status ("target" vs. "peripheral") in the litigation, and time to trial – affect settlement values. They also know and factor into settlement negotiations such things as how trial structures (individual, small group consolidations, bifurcations of various types, class or "common" issues treatment of liability) will impact potential liability and, thus, settlement value. Projected across any large collection of cases they know how often trial results will favor defendants and how often they will favor plaintiffs and, if the latter, what range of awards to expect. Their objective in settling cases is not to draw a line in the sand. It is to reach a correct price that takes all the relevant factors into account. Their objective in taking a case to trial is usually a strategic one, i.e., to reset or reaffirm values in the scores of other cases like it that will be valued and settled in the future.

C. The Medical and Technical Positions Taken By Grace's Experts Are Statements Of Controverted Opinion Repeatedly Evaluated By Juries Whose Decisions On These Disputes Inform The Settlement Process

The medical and scientific positions set out in the expert reports submitted on behalf of Grace are for the most part only one side (the defense side) of issues that have been repeatedly adjudicated from the earliest days of the litigation. This is not the first time an asbestos litigant has urged that certain issues be determined for all time in a single trial or proceeding. But, with very few exceptions, courts have been unable to fashion procedural devices to adjudicate such issues for all time. Class actions have largely been rejected. Despite early attempts by plaintiffs to leverage trial victories there has been virtually no application of collateral estoppel or res

judicata principles to bind a defendant to one adjudication.⁵ Even "mass" trials – highlighted by Grace as examples of asbestos litigation abuse – have generally sought only to adjudicate selected "common" issues related to generic company liability in the cases actually consolidated before the court.

The overwhelming litigation practice has been case specific, fact centric, serial determinations (sometimes in small groups of cases) with substantial but increasingly predictable variations in outcomes. Evidence on these issues goes into the mix, along with other facts in the repetitive asbestos trial process. Thus, for example, a defendant like Grace – looking at its trial results and those of other defendants – will know how often its chrysotile defense is likely to prevail and, when it does not, how it might affect jury attitudes about Grace's verdict form share allocation. Thus, choosing any single resolution of an issue in controversy ("pleural plaques are not injury" or "only certain spirometry results prove asbestosis") blinks the reality of the process as it has played out in numerous courts over decades.

The back and forth between the ACC's experts and Grace experts on medical and product exposure issues⁶ is a cross-section of the issues that have been litigated in asbestos cases for years. Dr. Weill's rebuttal report for Grace, for example, responds to reports by ACC experts, including Dr. Hammar, Richard Lemen, William Longo, Barry Castleman and Arnold Brody – each of whom is a frequent witness for plaintiffs in the litigation. Dr. Weill's initial report sets out criteria he would employ to determine the presence of asbestos disease. His rebuttal report challenges the 2004 ATS Guidelines for diagnosing asbestosis (viewed as favorable to claimants), and endorses the (much older) 1986 ATS Guidelines. Dr. Epstein, for Grace, points to medical literature supporting both sides of the long running dispute over whether a lung cancer can be attributed to asbestos in the absence of "asbestosis." Dr.

⁵ Grace also tried to employ collateral estoppel. Having won earlier punitive damages cases in Lincoln County, Montana, Grace sought collateral estoppel in its favor in *Finstad v. W. R. Grace & Co.*, 8 P.3d 778 (Mont. 2000). The Supreme Court of Montana denied application, reasoning that the circumstances of the Libby Mine employee there involved differed from those of other Libby Mine employees as to whom Grace had been successful emphasizing the "particular facts and circumstances" of each claim. Id at 784. And, of course, Grace lost the punitive damages issue before several juries.

⁶ Although not a medical or product exposure issue, so-called "state of the art" expert evidence creates another recurring expert opinion factual dispute regularly sent to juries. Dr. Joseph Rodicks, an expert in toxicology and human health risk assessment, reviewed the "liability" facts relevant to Grace. He concluded that Grace did not ignore worker health issues (Rebuttal Expert Report of Joseph V. ("Rodricks Rebuttal Report") at p. 27) and that "W. R. Grace was engaged in activities consistent with contemporaneous risk management and product stewardship programs." (Rodricks Rebuttal Report at p. 27.) Such testimony is commonly presented on behalf of defendants. It does not go unrebutted, and plaintiff experts routinely review corporate "knowledge" materials to support views that the company acted negligently, recklessly, or even with conscious indifference to human health or safety. These disputes present jury issues in almost all cases.

Hammar's opinion is that exposure alone without asbestosis increases lung cancer risk. Dr. Weill disagrees with ACC expert testimony that asbestos can make a superimposed contribution to COPD (a lung disease associated with smoking). Dr. Weill takes the view that diffuse pleural thickening always involves radiographic "blunting" of the costophrenic angle on chest films. ACC experts say otherwise. Dr. Weill replies that the ILO and the "medical community" believe the blunting is always present. These are all regular debates by contending experts in the litigation⁷ that have been presented to juries for many years. Those juries have sometimes accepted the defense view. Often in my experience they have accepted the plaintiff's evidence. Those jury decisions on the disputed issues highlighted by Dr. Weill and other Grace experts provide very important information on which Grace and the other defendants evaluated and settled cases.

Different courts in different states have developed unique formulations how, when and under what circumstances these issues will be presented. The jury verdicts vary within and between jurisdictions with different substantive or procedural rules and those jury verdicts in turn inform the settlement decisions made by defendants who resolve the cases based on what they understand has happened – and will continue to happen – in the courts as cases are tried.

The following are examples, chosen because they are discussed in the medical and scientific expert reports submitted in this case, of some of the disputes that are serially litigated in this way. Because these issues are constantly tried to juries, the results are both varied and voluminous, creating a very large store of information about what juries will do with these issues.⁸

⁷ The Supplemental And Rebuttal Report of David Weill, M.D. actually underscores this in addressing the reports of ACC experts Welch, Whitehouse, Frank and Roggli. He says that the ACC experts "present as fact areas that are intensely debated in the medical literature." (Weill Supplemental and Rebuttal Report at p. 12) He sums up the debate on when to attribute lung cancer to asbestos by observing that "there is considerable disagreement and much debate about the association of asbestos exposure, asbestosis and lung cancer." (Weill Supplemental and Rebuttal Report at p. 13) and notes that the association between airways disease and asbestos exposure "is quite controversial and often debated." (Weill Supplemental and Rebuttal Report at p. 14)

⁸ Appellate courts have examined these issues as well and I have referred to some of those decisions. But my intent in doing so is not to survey or summarize the law but to provide illustrations how and under what differing circumstances trial courts have approached these issues in hundreds of cases.

1. Compensability of Non-Malignant and "Unimpaired" Claims⁹

Waves of non-malignancy cases, including filings by so-called "non-impaired" claimants have been a fact of life in the litigation since at least the middle 1980s. Recurring litigation over the compensability of such claims in the tort system has been a mainstay of the litigation for more than 20 years.¹⁰ The issues framed for decision on a claimant by claimant basis present a broad spectrum of medical opinion questions that depend on expert testimony. That expert testimony is in consistent conflict in jury trials presenting issues such as these:

- Should American Thoracic Society ("ATS") standards define what is a legally compensable claim?
- Should fear of cancer be compensated? If so, what plaintiff specific facts support an award?
- Is medical monitoring available as an element of damage? If so, under what conditions and on what expert proof?
- Should "mere" pleural changes support an award of damages?
- Should there be a difference in compensability between "circumscribed" pleural plaques and "diffuse" pleural thickening? Which condition afflicts this plaintiff?
- Does the plaintiff have a pleural condition which is causing impairment?
- Does asbestos contribute to "obstructive" disease or only to restrictive disease?

⁹ Dr. Dunbar presented his opinion that "unfounded" and "invalid" non-malignant unimpaired claims were filed against Grace (Dunbar Report at p. 13). Grace experts set out methods "that can be used to evaluate injury claims" (e.g., Expert Report of Elizabeth Anderson, Ph.D. ("Anderson Report") at p. 3) and present opinions concerning what the diagnostic criteria should be. (Expert Report of Paul Epstein, M.D. ("Epstein Report") at pp. 5-15; Weill Report at pp. 24-26.)

¹⁰ Defendants have been challenging "marginal" non-malignant cases at least since the early 1980's. The Asbestos Claims Facility ("ACF") tried many such cases across the country and especially in Northern California in the mid-1980's. Juries were sometimes -- more frequently in some jurisdictions than in others --persuaded by these arguments, but not always. In addition, where juries rejected the defense positions, verdicts could and did range into hundreds of thousands of dollars.

- Should new imaging technologies such as high resolution thin section CT or gallium uptake scanning be accepted as diagnostic tools?
- Should pathologic or "subradiographic" asbestosis be compensated?
- Should impairment be required to support a damages award?
- What is "impairment" -- is it measured by subjective complaints or only by specified testing decrements or findings?

Efforts to resolve these issues and others like them as matters of law in favor of defendants in specific cases have succeeded, but rarely. More often, given the nature of asbestos disease, particularly the uncontested fact that asbestos exposure can and does cause disease and because of the considerable judicial familiarity with asbestos litigation and the medical issues presented in it, courts have treated these issues as questions of disputed fact to be resolved by juries weighing competing expert testimony.

The tort system is generally not governed by rigid medical definitions of asbestos related disease states.¹¹ Except in instances of legislative intervention, claims for asbestos disease are simply a variant on state and federal (FELA, e.g.) tort law causes of action – such as negligence, intentional misconduct, strict product liability, failure to warn and the like. The basic tort question is not whether the plaintiff has a defined asbestos “disease” but rather whether the plaintiff has an “injury” or has suffered “harm” caused by breach of an obligation owed by the defendant. For example, the encompassing term “pleural asbestosis” – not mentioned in any of the Grace expert reports – has been the basis for claims for many years¹² and illustrates how the tort system embraces the more generalized inquiry whether the plaintiff has proved “injury” or “bodily harm” (See, e.g., Restatement (Second) of Torts § 456)

¹¹ For a reported example specific to Grace, see *W. R. Grace v. Pyke*, 661 So.2d 1301 (D. Ct. App. Fl. 1995), affirms state law damages – other than future loss of earning capacity – award in favor of still employed 53 year old pipe fitter weighing 322 pounds with “asbestos related disease”, including an award of \$245,000 for “pain and suffering”.

¹² “Pleural asbestosis” was described by noted asbestos disease researcher Dr. Irving J. Selikoff as early as 1978. See *Mauro v. Raymark Industries, Inc.*, 561 A.2d 257, 259 (N.J. 1989)(acknowledging propriety of fear of cancer damages “provided the jury found that Mauro sustained an asbestos-related injury” but rejecting damages predicated on risk of future disease unless that disease is “probable”). Trials of asbestos cases often involve evidence, often disputed, of the existence of “pleural asbestosis” which has been compensated as an asbestos injury; the same is true for “pleural changes”, “pleural thickening” and “pleural plaques.” Decisions have described “pleural asbestosis” for years. E.g., *Gatling v. Eaton Corp.*, 807 A.2d 283, 288 (Pa. Super 2002); *Asbestos v. Bordelon, Inc.*, 726 So.2d 926 (La. App. 1998); *Mancari v. A.C. & S., Inc.*, 670 A.2d 1339 (Del. 1995); *Lockwood v. A.C. & S., Inc.*, 722 P.2d 826 (Wash. App. 1986).

rather than confining itself to bright dividing lines defining non-malignant asbestos related diseases¹³ such as those set out in the competing expert reports. For example, Dr. Daniel Henry, a chest radiologist and B-Reader, proposes what he describes as a "reliable" method for evaluating x-ray films, and sets out a protocol for "acquiring and evaluating credible chest x-ray data for the individuals who have sued W. R. Grace." Henry rep. at p. 6. Dr. Henry's method may have considerable merit. But the practice in tort system, whether the "methods" used by physicians interpreting chest x-rays are "reliable" and whether particular expert opinions based on reading x-ray film should be credited, are treated as a fact questions to be resolved by juries charged to evaluate the credibility of expert and other witnesses. Juries are routinely presented with conflicting interpretations of chest x-rays.

In "unimpaired" or "pleural plaque" cases, juries award damages after hearing evidence that asbestos disease is incurable and progressive and that asbestos can cause cancer. Some courts allow juries to award damages for a plaintiff's fear of contracting cancer.¹⁴ Others allow recovery for "medical monitoring".¹⁵ Entitlement to

¹³ Dr. Paul E. Epstein, a pulmonary physician and B-Reader presented by Grace presents a construct for diagnosing "asbestosis". He addresses the difference between the 1986 and 2004 ATS criteria for diagnosing asbestosis, and states his opinion that the diagnostic criteria should include an ILO reading of 1/1 (the 1986 ATS standard) and should "usually" be supported by other manifestations of asbestos disease such as pleural changes. Epstein Report at p. 10. But courts have not imposed either of these requirements on juries tasked with deciding whether "injury" exists.

¹⁴ The fact that asbestos causes cancer and that asbestos exposed workers face an increased risk of contracting cancer has led to recognition in many courts that "fear of cancer" (a particularized variant of the common law entitlement to damages for suffering or emotional distress attendant to a physical harm or injury) is compensable. See Norfolk & Western R. Co. v. Ayers, 538 U.S. 135 (2003)(FELA suit in West Virginia, damages based in part on fear of contracting cancer were awarded in amounts ranging from \$770,000 to \$1.2 million less reduction for comparative fault) holding that mental anguish damages resulting from the fear of developing cancer may be recovered under the FELA, a plaintiff who has "asbestosis" can recover damages for fear of cancer without proof of physical manifestations of the claimed emotional distress but must prove that his alleged fear is genuine and serious. "Asbestosis" was not defined by the Court, but the verdicts were entered in a West Virginia County often criticized by defendants for its liberal treatment of unimpaired asbestos claims. The Ayers Court noted that claims for pain and suffering associated with, or "parasitic" on, a *physical injury* are traditionally compensable, citing Restatement (Second) of Torts § 456 (1963-1964) for the general rule: "If the actor's negligent conduct has so caused any bodily harm to another as to make him liable for it, the actor is also subject to liability for "(a) fright, shock, or other emotional disturbance resulting from the bodily harm or from the conduct which causes it" The Supreme Court surveyed the jurisdictions that allow recovery for fear of cancer found that "a clear majority sustain recovery" Id. at 150-51 and that, "Contrary precedent is slim in comparison to the heavy weight of authority." Id. at 151.

¹⁵ Medical monitoring damages are simply another item of medical expense in cases involving impairment. They can also be "stand alone" claims available to claimants without any current impairment or disability. Gutierrez v. Cassiar Min. Corp., 64 Cal. App. 4th 148 (1998), is one of many decisions allowing recovery for medical monitoring (of unimpaired claimants) in asbestos cases. State tort law varies on the question whether medical monitoring absent some "injury" is compensable. See,

medical monitoring damages in some courts turns on the existence of current "injury", which is itself a question turning in large part on trial evidentiary debates over whether lung or pleural changes, e.g., are or are not injury.

Plaintiffs as well as defendants have sought definitive rulings on whether pleural plaques or "unimpaired" claims constitute "injury" or "bodily harm. For example, plaintiffs sought jury instructions to the effect that pleural changes were injury as a matter of law in *Howell v. Celotex Corp.*, 904 F.2d 3 (3d Cir. 1990), where the court noted conflicts in the evidence on pleural thickening and held: "In the face of this medical disagreement, we conclude that the presence of pleural thickening may not, alone, mandate a jury finding of compensable injury for an otherwise healthy plaintiff. We conclude that the substantial medical disagreement over the classification of pleural thickening prevents us from declaring it to be an injury as a matter of law. *This question is factual and remains within the province of the trier of fact.*" *Id.* at 4. And, both sides have used traditional motions (for JNOV or for a new trial) to press their positions on these same issues when dissatisfied with jury awards.¹⁶ In the same way, where the issue is relevant at all to the outcome, asbestos courts regularly send to juries the question whether a claimant is "impaired" by asbestos caused physical changes.¹⁷

In 1991, the value of "unimpaired" claims was recognized by a committee of asbestos experienced federal judges appointed by the Chief Justice. "[S]tate law recognizes the validity of these 'non-impaired' claims...." Report of the Judicial Conference Ad Hoc Committee on Asbestos Litigation (March 1991) at p. 26.

e.g., *Paz v. Brush Engineered Materials, Inc.*, 949 So.2d 1 (Miss. 2007) (surveying cases in context of beryllium exposure and declining to recognize a pure medical monitoring cause of action).

¹⁶ E.g., in *Bradley v. A.C. & S. Co., Inc.*, 1990 WL 123017 (Del. Super. 1990), The court found pleural change verdicts to be too low -- so grossly out of proportion to the injuries suffered as to shock the court's conscience and sense of justice. The court reviewed 21 Delaware jury verdicts, noting awards of from \$100,000 to \$4 million, with an average pleural disease award of \$163,000. The court set the damage awards aside and ordered a new trial. Although courts sometimes have adjusted jury verdicts by additur or remittitur, in the main, the amount of damages, if any, to be awarded is left to the discretion of the jury.

¹⁷ Impairment can be an issue in "asbestosis" cases as well as in "pleural change" cases. Defendants typically argue that there is no impairment and that, as a result, the jury should not award damages. Plaintiffs frequently counter with expert testimony that there is impairment and that asbestos caused lung or pleural changes contribute to that impairment in some significant or appreciable degree. Often the issue is whether cigarette or other disease resulting in functional impairment is present and, if so, whether the asbestos changes have contributed to cause shortness of breath or other subjective complaints by the plaintiff. As with the issue of whether injury has occurred in my experience it is rare that a trial court will rule that there is no impairment as a matter of law. "[I]t is well settled that the fact and extent of the impairment are jury questions" *Kershaw v. Celotex Corp.*, 1989 WL 817174 (Ct. Comm. Pleas Phila. 1989).

2. "Restrictive" versus "Obstructive" Disease

Whether asbestos contributes to obstructive disease (e.g., Epstein Report at pp. 15-17) also is an old debate. Defense lawyers have tried from the beginning to convince juries that only "restrictive" disease should be laid at the door of asbestos. But juries regularly are allowed to decide the question of asbestos-related "injury" in cases involving obstructive or mixed restrictive/obstructive disease.

3. Levels of Exposure to Asbestos

Recurring litigation conflicts over the levels of fiber exposure necessary to cause or contribute to asbestos disease also have been a regular feature of asbestos litigation since before the defendants in *Borel* argued that plaintiff had failed to prove which of the many products he had been exposed to had caused his disease.¹⁸

Some defendants have retained experts to test their products under controlled circumstances, or to collect and study historic job site air sampling results, to support testimony that there was no significant exposure or that there were very low fiber concentrations. Such testimony is presented here by Grace experts, Gordon Bragg,¹⁹ Peter S.J. Lees,²⁰ and Dr. Richard Lee.²¹ Defendants typically link testimony that

¹⁸ *Borel v. Fibreboard Corporation*, 493 F.2d 1076 (5th Cir. 1973), cert. den. *Fibreboard Paper Products Corp. v. Borel*, 419 U.S. 869 (1974), which, applying Texas law, held that whether a defendant's conduct was a substantial factor causing injury was a jury question and foreshadowed the widespread application of state law tort rules rendering liable each defendant who contributed substantially to a plaintiff's total or cumulative exposure to asbestos. The Court noted trial evidence that "inhaling asbestos dust in industrial conditions, even with relatively light exposure," can produce the disease of asbestosis, *Id.* at 1083, and that

"[A]sbestos fibers, once inhaled, remain in place in the lung, causing a tissue reaction that is slowly progressive and apparently irreversible... [The]...effect of the disease may be cumulative since each exposure to asbestos dust can result in additional tissue changes. All of these factors combine to make it impossible, as a practical matter, to determine which exposure or exposures to asbestos dust caused the disease."

¹⁹ Dr. Gordon Bragg is a emeritus professor of mechanical engineering. He expresses the opinion that if asbestos is disturbed the level of fibers in the air returns to levels comparable with ambient air in a short period of time, and that "Airborne asbestos fibers do not circulate for long." (Expert Report of Gordon Bragg, Ph. D. ("Bragg Report" Conclusions 12 and 16.) This testimony is commonly presented by defense industrial hygiene experts at trial and is commonly countered by directly opposed testimony to the effect that asbestos fibers are easily "entrained" into the air where they remain suspended for long periods of time and "drift" into adjacent work spaces.

²⁰ Dr. Peter S. J. Lees offers industrial hygiene based testimony to the effect that all workers involved in the application of Monokote had either very low or intermittent exposures, or both. (The Role and Process of Exposure Assessment Regarding Asbestos- Related Personal Injury Liability,

products emitted little dust with medical expert witness testimony to the effect that the low levels of emission described by industrial hygiene and similar experts are not capable of causing disease, or likely did not cause the disease in question. Here, Dr. Anderson, for example, concludes that it is scientifically implausible that disease can be attributed to exposure to Grace products in various categories of workers. In her opinion such "claims do not have merit and therefore should not be considered further." Anderson Supp. Report at p. 16. Whether particular exposures are sufficient to constitute a legal cause of disease or injury is treated as a jury question in the vast majority of cases in which the issue arises. Plaintiffs respond to testimony that products were not dusty with countering expert testimony such as that offered here by the ACC (Dr. Longo, Steve Hays) to establish significant fiber release from the defendant's products. Plaintiffs also routinely offer first hand testimony about the particular conditions at particular sites, including substandard hygiene, poor ventilation, periods of intense or peak exposures (clouds of dust, workers looking like snowmen, etc.). For example, so-called "foxtail" testimony sometimes offered by co-workers describes thick layers of dust accumulated at jobsites that were agitated into the air when swept up with "foxtail" or other brooms.²² This testimony is married to testimony by industrial hygiene and medical experts that such intense "peak" exposures were especially hazardous. All of this allows plaintiff counsel to argue that the conditions depicted by the defendant's expert testimony were not adequately representative of what the individual plaintiff experienced. At trial this sort of testimony

Peter S. J. Lees ("Lees Report") at pp. 6-8.) Dr. Lees' rebuttal report conflicts with the report of ACC expert William Longo, which presents conclusions to the contrary.

²¹ Dr. Richard J. Lee reports that the "matrix" of Grace products "binds" the asbestos fibers such that there is little fiber release and much of the fiber released is not respirable. (Expert Report of Richard J. Lee, Ph.D. ("Lee Report") at pp. 6-7.) (Even defendants who manufactured high temperature thermal insulation have argued that "encapsulation" of asbestos fibers in the "matrix" of the products limited the amount of respirable fiber released from those products. Such testimony was and is regularly countered by testimony by plaintiff experts that application, use or removal of products results in fiber release despite "encapsulation". Dr. Longo, for example, often offers such testimony. The propensity of a product to release respirable fibers is a basic jury question in most trials involving products that are asserted by the defendant to be incapable of releasing injurious quantities of fibers.

²² W. R. Grace encountered its own variant of "foxtail" testimony. *Harashe v. Flintkote Co.*, 848 S.W.2d 506 (Mo. Ct. App. 1993) affirmed a mesothelioma award of \$2.5 million based on exposure to tremolite contaminated vermiculite in the Zonolite product. Plaintiff was a career pipefitter who worked with and around many other asbestos products over his career. He testified, though, that he applied 20 bags of Zonolite in his own residence during one day in the early 1950s, during which he worked in the cramped quarters of his attic and had his face close to the insulation which he said emitted "heavy amounts of dust". He went into the attic twice a year thereafter, and it was "quite dusty." He worked on two other limited occasions with Zonolite insulating his home. Under the applicable state law, the appellate court emphasized that mesothelioma can be caused by "limited exposure" and a defense expert concession that it is possible to contract mesothelioma "from a single heavy exposure" as "One way in which the fibers can evade the body defenses is by overloading the system as from a heavy dose . . ."

is linked to other plaintiff expert witness testimony to the effect that the described (low level) emissions were sufficient to be a contributing cause of the disease in question.

Defendants have attempted to eliminate so-called "low dose" claims through definitions of or standards for finding "proximate" or "legal" causation. For example, defendants have argued for adoption of a standard that required evidence of exposure to meet the so called regularity, frequency and proximity test. Some courts adopted this standard, others did not. See, e.g., *Chism v. W. R. Grace & Co.*, 158 F.3d 988, 992 (8th Cir. 1998)(affirming summary judgment for defendant because plaintiffs failed to present expert evidence that Zonolite vermiculite contained asbestos that could have been released as inhalable fibers).²³

The running dispute over the level of exposure to asbestos which should be given legal significance has carried over into the expert reports in this proceeding. At pages 18-19 of his Supplemental and Rebuttal Report, Dr. Weill disagrees with the opinion offered by Dr. Welch that each and every asbestos exposure is a substantial contributing factor to disease. This precise conflict in medical opinion has been at the center of the asbestos litigation for decades. Plaintiffs traditionally present evidence just as Dr. Welch offered it here, and defendants counter with opinions just as expressed by Dr. Weill. The question whether the plaintiff's exposure to a particular defendant's products was "enough" to qualify under tort law causation standards is almost always left to the jury. For example, the form jury instruction promulgated for use in California asbestos trials provides that "Plaintiff may prove that exposure to asbestos from [a product] was a substantial factor causing [his] illness by showing, through expert testimony, that there is a reasonable medical probability that the exposure contributed to [his] risk of developing cancer." Judicial Council of California Civil Jury Instructions (CACI) 435 (Spring 2007).²⁴ This model jury instruction is derived from the decision of the California Supreme Court in *Rutherford v. Owens-Illinois, Inc.*, 16 Cal.4th 953 (1997), where the court reviewed the trial evidence presented²⁵ in a way which underscores that the conflict between the ACC and Grace

²³ In *Chism*, the Eighth Circuit cited *Harashe v. Flintkote Co.*, 848 S.W.2d 506 (Mo. Ct. App. 1993), discussed in footnote 22 above, as demonstrating how an asbestos plaintiff can meet the causation requirements. 158 F.3d at 992.

²⁴ See also the alternate formulation in BAJI 3.78 (Spring 2007)(exposure to a defendant's product is a substantial factor in producing plaintiff's illness if plaintiff established by a preponderance of the evidence that in reasonable medical probability this exposure was a substantial factor contributing to the plaintiff's risk of developing cancer or asbestosis).

²⁵ "Medical testimony was also presented to establish that the plaintiffs' asbestos-related disease was "dose-related"- i.e., that the risk of developing asbestos-related cancer increased as the total occupational dose of inhaled asbestos fibers increased. Dr. Allan Smith, a professor of epidemiology, testified that asbestos-related lung cancers are dose-related diseases, and that all occupational exposures through the latency period can contribute to the risk of contracting the diseases. Owens-Illinois's own medical expert, Dr. Elliot Hinckes, testified that asbestos-related cancers

experts is a reprise of expert disputes on causation that have been resolved by ultimate submissions to juries for many years.²⁶

are dose responsive, and that if a worker had occupational exposure to many different asbestos-containing products, each such exposure would contribute to the degree of risk of contracting asbestos-related lung cancer, although he testified further that a very light or brief exposure could be considered "insignificant or at least nearly so" in the "context" of other, very heavy exposures." (*Rutherford v. Owens-Illinois, Inc.*, 16 Cal.4th at 961).

²⁶ *Owens-Illinois, Inc. v. Hunter*, 875 A.2d 157 (Ct. Spec. App. Md. 2005) provides a good illustration how these issues typically are dealt with:

"Owens-Illinois first argues that the Hunters failed to satisfy their burden, under *Eagle-Picher Industries, Inc. v. Balbos*, 326 Md. 179, 604 A.2d 445 (1992), of proving that Owens-Illinois substantially contributed to Mr. Hunter's death by showing that he had been subjected to a sufficient level of asbestos exposure. Under the analytical framework described in *Balbos*, Mr. Hunter is considered a "bystander," because he was an electrician working in the vicinity of asbestos workers, but he was not directly working with asbestos. Id. at 210; 604 A.2d 445. *Balbos* set the bystander standard of proof as follows:

Whether the exposure of any given bystander to any particular supplier's product will be legally sufficient to permit a finding of substantial-factor causation is fact specific to each case. The finding involves the interrelationship between the use of a defendant's product at the workplace and the activities of the plaintiff at the workplace. This requires an understanding of the physical characteristics of the workplace and of the relationship between the activities of the direct users of the product and the bystander plaintiff. Within that context, the factors to be evaluated include the nature of the product, the frequency of its use, the proximity, in distance and in time, of a plaintiff to the use of a product, and the regularity of the exposure of that plaintiff to the use of that product. In addition, trial courts must consider the evidence presented as to medical causation of the plaintiff's particular disease.

Id. at 210-11, 604 A.2d 445 (citations and quotation marks omitted). This has become known as the "frequent, proximate, and regular" standard, or simply the *Balbos* standard. See also *Georgia-Pacific Corp. v. Pransky*, 369 Md. 360, 800 A.2d 722 (2002) (applying *Balbos* to an asbestos bystander); *Owens-Corning Fiberglas Corp. v. Garrett*, 343 Md. 500, 526-30, 682 A.2d 1143 (1996) (same)."

And see, *Cadlo v. Metalclad Insulation Corporation*, 2007 WL 1666660 at * 14 (Cal. App. 1 Dist. 2007) (portions not certified for publication):

"We conclude sufficient circumstantial evidence was presented to support a reasonable inference of Cadlo's exposure to Metalclad's asbestos product. Though plaintiffs presented no evidence as to how much insulation was used at the LBNS [Long Beach Naval Shipyard] or how much was supplied by Metalclad, plaintiffs' evidence established that: (1) during the period Cadlo served on board the USS Black, Metalclad supplied large amounts of Kaylo insulation to the LBNS and (2) for two and one-half months during that period, while the USS Black was at the LBNS, Kaylo insulation was installed on the ship. From this evidence it is reasonable to

Another variation of recurring levels of exposure disputes is presented by the controversy whether there is a "threshold" of injurious asbestos exposure. Defense experts (e.g., Anderson Report at pp. 6-9) conclude that there must be a "threshold" of exposure below which no disease can be proven to result. Such threshold evidence has been a mainstay of defense efforts since the mid 1980s. It is countered at trial by evidence that no threshold is necessary and that, in any event, individual susceptibility factors are much more important. Also, of course, plaintiffs argue that the plaintiff is in fact diseased is proof that plaintiff was exposed above whatever "threshold" might exist. Significantly, tort system causation rules are such that all exposures – not just the exposure to one defendant's products – "count" toward any threshold that may exist. Those same rules often provide that if the fiber from a defendant's product made a "meaningful" or "substantial" contribution to causation – even if disease would not have occurred absent exposure to the products of others – causation can be found by the trier of fact. See, e.g., discussion of California jury instructions above.

Regardless of the formulation of the causation standard applied by the state courts, whether the plaintiff's exposure was legally sufficient typically has been treated as a question of fact for resolution by the jury on all evidence – medical, eye witness and industrial hygiene.²⁷

infer that the Kaylo insulation supplied by Metalclad was installed on the USS Black in Cadlo's presence."

²⁷ See, e.g., *Hedgecorth v. Union Pacific R. Co.*, 210 S.W.3d 220 (Mo. App. E. D. 2006) (Office worker exposed during remodeling project, work around asbestos covered pipes generated dust, defendant argued on appeal that the asbestos in the dust was minuscule, plaintiff verdict affirmed in pertinent part as the issue was for the jury); *In re Asbestos Litigation*, 911 A.2d 1176, 1208 (Sup. Ct. Newcastle Co., Del. 2006) ("[T]he question of whether an injury has occurred as a result of a minimal exposure to asbestos as part of an ongoing, cumulative exposure is for the jury to decide . . . Nothing in Delaware law requires that evidence to take the form of, or to be comprised (even in part) of, epidemiological evidence. This is true regardless of whether plaintiff is able to exclude all other potential causes beyond the toxic substance at issue.") Grace, for example, has argued that its products simply were not dangerous as applied in buildings with mixed results. Summarizing those arguments in a property damage case on appeal from a verdict against Grace the Missouri Court of Appeals found that "a jury could reasonably conclude that Mono-Kote was unreasonably dangerous." *Clayton Center Associates v. W. R. Grace & Co.*, 861 S.W.2d 686 (1993). The United States Court of Appeals for the Fourth Circuit considered and rejected Grace arguments in another property damage case that its products were too low in fiber emissions to be dangerous, that the products were not defective and that no valid epidemiology supported claims to the contrary. *City of Greenville v. W. R. Grace*, 827 F.2d 975 (4th Cir. 1987), rehearing denied, 840 F.2d 219 (4th Cir. 1988) The court found "ample evidence" on which to conclude Monokote was a defective product. As the asbestos in Monokote had "practically no utility" a jury could have found defect even without finding "a great degree of risk". The court stressed fiber counts found in carpets and noted that Grace evidence of low airborne concentrations "merely created a jury question".

4. Epidemiology in the Asbestos Litigation

Another issue, often closely related to levels of exposure disputes, regularly litigated in asbestos cases is whether epidemiology is required to assign legal causation in individual cases. For example, defendants routinely argue in cancer cases that the circumstances of the plaintiff's exposure were such that the causation of cancer should be assessed by resort to selected published epidemiological studies, and argue further that the plaintiff's work history, job classification, etc., make plaintiff comparable to epidemiological study cohorts that demonstrated no (or insufficiently elevated) relative risks.²⁸ Plaintiffs have countered such testimony since the early 1980s by presenting evidence that the plaintiff's unique exposure facts placed plaintiff outside of the cohorts selected by the defense and within other cohorts in which increased risk was demonstrated. Plaintiffs also argue that given the well known power of asbestos to cause disease, no "comparable" epidemiological study is required, or by pointing to medical "markers" of exposure (e.g., pleural changes) confirming levels of exposure sufficient, in the opinion of medical experts, to link the cancer to the exposure.²⁹

In asbestos, courts routinely have submitted these epidemiologic disputes to juries for resolution. Recent rulings in cases against the so-called "friction defendants" are illustrative. Those defendants, like Grace, made chrysotile products and, like Grace, they argue that the level of fiber release from their products should not be deemed sufficient to cause disease. From 2004 through 2006, these defendants sought rulings that cases based on exposure to chrysotile asbestos in automotive products such as brake linings and clutch facings should be barred because the epidemiology showed that such claims lacked merit. As does Grace here, the friction

²⁸ Dr. Anderson states that to establish tort causation "reliance must be placed foremost on epidemiologic evidence that establishes a causal association between the claimant's specific conditions of exposure to a W. R. Grace product and the reported disease" (Anderson Report at p. 3), and that causal relationships between specific exposure circumstances and disease can be demonstrated to reasonable scientific "certainty" only through "well-conducted" epidemiologic studies that rely on "substantially similar exposure data." (Anderson Report at p. 4.)

²⁹ Dr. Suresh Moolgavkar, a cancer epidemiologist presented by Grace, reports that up to 30% of mesothelioma cases have no exposure to asbestos. Testimony such as Dr. Moolgavkar presents here has been a staple of the defense of "low dose" mesothelioma cases since the 1980s. Defendants have long pointed to other possible causes of mesothelioma -- therapeutic or other radiation, polio vaccine and the like. Defendants also regularly seek to convince juries that mesothelioma occurs spontaneously (labeling such cases "idiopathic") without asbestos exposure. Plaintiff experts, on the other hand, testify not only that asbestos exposure is the only proven cause of malignant mesothelioma, but also that the vast majority of mesotheliomas are asbestos induced and that studies which failed to identify asbestos exposure simply did not look hard enough for such exposure.

defendants relied on opinions presented by expert witnesses with the consulting group Exponent.

Justice Helen Freedman in New York surveyed the law on epidemiology in asbestos litigation and denied the motions filed in her court. *Berger v. Amchem Products*, 13 Misc.3d 335 (N.Y. Sup. 2006) ("[W]hile epidemiology may be the 'gold' standard, it cannot be the only standard in an area where causation is both particularistic and well established. Federal courts have also held that epidemiological evidence is not necessary to establish causation."). The same result ensued in the Delaware asbestos litigation. *In re Asbestos Litigation*, 911 A.2d 1176 (Sup. Ct. Newcastle Co., Del. 2006). There Judge Slight held that epidemiological evidence is not a prerequisite to establishing general causation. There, as here, Drs. Lemen, Hammar, and Frank testified for the plaintiffs. The Court reviewed the issue in light of *Daubert*, concluding that (*Id.* at 1209-10):

"[T]he question of whether an injury has occurred as a result of minimal exposure to asbestos as part of an ongoing, cumulative exposure is for the jury to decide... Nothing in Delaware law requires that evidence to take the form of, or to be comprised (even in part) of epidemiological evidence." ³⁰

The "chrysotile defense", the assertion that epidemiology has shown that chrysotile fiber cannot cause mesothelioma, or is such a weak cause (requiring what the defense experts describe as enormous levels of exposure) that it should not be deemed causative in a particular case, has long been central to some defendants' defense of mesothelioma cases. That position is advocated here by Grace experts Elizabeth Anderson and David Garabrant. Plaintiffs have countered the defense

³⁰ The "friction" defendants also litigated the question whether particularized epidemiology is required in the Michigan courts. At issue in that case was the admissibility, under a *Daubert* standard, of the testimony of Dr. Richard Lemen, proffered here as an expert for the ACC. In January 2007, the Court of Appeals of Michigan court affirmed admissibility of Dr. Lemen's testimony in support of a verdict for a mesothelioma victim who had worked as an automobile brake mechanic, and rejected the defense position that only controlled epidemiological studies can establish a causal link between an agent and disease. *Chapin v. A & L Parts, Inc.*, 732 N.W.2d 578 (Ct. App. Mich. 2007).

And see, e.g., *City of Greenville v. W.R. Grace*, 827 F.2d 975 (4th Cir. 1987), *supra*, where the Fourth Circuit rejected claims by Grace that no epidemiology supported the verdict against it. Plaintiff expert testimony was that asbestos released from the products created a health risk and the Fourth Circuit rejected Grace assertions that epidemiology was required and that experts should not be permitted to extrapolate low dose risks from higher dose data ("one technique accepted in the scientific community . . . is to extrapolate the risk downward from results obtained in studies involving high-level exposures." Citing cases, the court agreed with other Circuits that product liability law does not preclude recovery until a "statistically significant" number of people have been injured.

arguments by presentation of expert testimony, buttressed by federal government and international health organization findings that all fiber types, including chrysotile, cause mesothelioma. Typical evidence on this point is marshaled in the expert reports of ACC witnesses Samuel Hammar and Richard Lemen. Generally, the "chrysotile defense" has not fared well, although trials have generated many jury verdicts, some accepting and some rejecting the defense. Not infrequently, however, presenting the evidence on the "chrysotile defense" where state law allows such a result, will convince juries to lower shares of responsibility – especially when compared to exposure to products containing amphibole (e.g., crocidolite or amosite) fibers.

5. Attribution of Malignancy To Asbestos

This debate over what cancers can be attributed to asbestos, and under what circumstances, is as old as the litigation itself. Conflicting expert opinion on whether "clinical asbestosis" is necessary for attribution of a particular lung cancer to asbestos this issue is routine, and routinely generates varying trial results. When and how low level exposures to asbestos – especially chrysotile asbestos – can be linked to mesothelioma has been a contentious issue for years. Beginning in 1997, plaintiff experts testifying to mesothelioma causation began relying significantly on the "Helsinki Criteria" promulgated by an international panel of scientists. See Consensus Report, "Asbestos, Asbestosis and Cancer: The Helsinki Criteria For Diagnosis And Attribution, Scand. J. Work & Environ. Health (1997) 23(4):311-16. Those criteria include the simple statement that, "an occupational history of brief or low-level exposure should be considered sufficient for mesothelioma to be designated as occupationally related." In practice, this statement of scientific consensus has served as a foundation for or corroboration of mesothelioma causation testimony by plaintiff experts such as Dr. Hammar. Disagreement between expert witnesses on the subject of attributing malignancy to asbestos is also presented for decision on a recurring basis when victims of what the litigation managers refer to as "other" cancers (cancers "other" than lung cancer or mesothelioma) present claims. In this realm, too, the predominant judicial reaction has been to submit the issue whether asbestos causes such cancers to juries for decision.

D. Imposing the Grace-Prescribed Criteria Would Tend to Understate Grace's Tort System Asbestos Liabilities

Dr. Florence is presented by Grace as an expert to estimate the number and value of "valid" pending and future claims "under assumptions regarding the evidence required to demonstrate the validity of the claims." (Expert Report of B. Thomas Florence ("Florence Report") at p. 1.) These assumptions are a distillation of the normative conclusions reached by Grace's experts.

I am familiar with ARPC's work. Dr. Florence and ARPC, of course, have considerable experience in estimating, *based on projections from historical claims information*, the number and value of asbestos claims that would have been presented against companies had they remained as defendants in the tort system. That is not

what was done here. Here, ARPC says it has performed an estimate "under a specific set of assumptions", viz: that only claimants who met specific criteria "would be able to sustain their burden of proof that their claims against Grace are valid". (Florence Report at 1.2.)³¹

In my view, application of the Grace valuation criteria will not produce results consistent with, and will underestimate the number and value of claims when compared to, those that would be obtained in trials and in the settlement of cases subject to the tort system.

1. The Criteria Would Exclude Many Non-Malignant Claims – Especially Pleural Injury Cases

The criteria given to ARPC require, at a minimum that non-malignant claims be established through a B-Reader report of asbestosis or "diffuse pleural thickening" and that any asbestosis diagnosis be supported by an ILO score of 1/0 or greater. Any estimation confined to B-reader results will underestimate tort system outcomes. These claims can go to juries based on diagnoses by physicians deemed qualified under expert witness rules, whether or not they are B-Readers. Even more importantly, the tort system does not limit recovery to pleural injury claimants manifesting "diffuse pleural thickening". Specifically, pleural plaque cases (claimants with localized circumscribed pleural injury) often are compensated under tort rules. Finally, juries can consider an "asbestosis" diagnosis whether or not it is supported by any particular ILO score. "Pleural asbestosis," for example, has been accepted as asbestos injury.

2. The Criteria Establish Minimum Impairment Standards For Asbestosis Which Do Not Reflect Tort System Rules And Which Would Exclude Or Undervalue Asbestosis Claims Routinely Compensated In The Tort System

ARPC were required to use "impairment" criteria to segment "severe" asbestosis from basic asbestosis – which, by the criteria, also requires specific findings to qualify as "impairment". In addition to use of B-readers and ILO scoring (discussed above) the Grace standards also would apply ATS standards requiring measured pulmonary function test (PFT) decrements as elements of estimation. To the extent such measures are used as benchmarks for presumptive qualifications of claims by a trust, or in distinguishing payment levels in group settlements, they have some utility. However, these criteria cannot serve to summarily eliminate cases from

³¹ In review of Grace's expert reports I am unable to find an opinion by Dr. Florence that the assumptions which constrained his estimation were accurate statements of tort system rules or that the result of his modeling represents expected outcomes in the tort system. I find no Grace expert report that offers an opinion that the assumptions on which ARPC was instructed to build its projection accurately mirror tort system rules.

the count of claims the tort system would determine to be meritorious. There is no tort system practice tying different levels of awards to particular PFT results. Especially, there is no practice that juries cannot hear evidence of impairment where ATS standardized testing has not been performed.

3. ARPC were told to assume that the only "valid" claims were those brought by workers who personally mixed or personally installed Grace products.

This limitation is not consistent with the practice in asbestos cases. The practice in trial is just the opposite – personal product use is not required, and claims by "bystanders" are routinely compensated if the jury believes there was sufficient evidence of deleterious exposure.

4. The Lung Cancer Causation Criteria Would Exclude Cases Which Are Compensated In The Tort System

ARPC were instructed that only lung cancer claims accompanied by a diagnosis of asbestosis based on a reliable B-Reader report and a "reproducible" ILO score of 1/0 or greater should be counted for estimation purposes. This instruction operates to exclude from consideration lung cancer claims that are compensated in the tort system. Whether asbestosis is required to attribute lung cancer to asbestos is often litigated, with experts of the parties taking different positions. Lung cancer cases without an "asbestosis" diagnosis are sent to juries and often are compensated in the tort system; e.g., cancer cases with accompanying "pleural only" changes are compensated as are cancer cases with various pathological markers of asbestos exposure or lung tissue burden. Defendants can present evidence and argue that a particular test or score is not "reproducible." Lack of reproducibility might impact the credibility of the proffered evidence but ordinarily will not prevent the test score from being admitted for consideration by a jury. The same is true regarding whether an asbestosis diagnosis is or is not predicated on a particular ILO score.

5. The Criteria Would Exclude "Other" Cancers Compensated In the Tort System

ARPC were instructed to count only laryngeal cancers. Application of this criterion would exclude malignancies that are compensated in the tort system. For example, colon and other GI tract cancers have been compensated on the strength of expert opinion testimony that they are asbestos related.³²

³² *In re Joint Eastern & Southern District Asbestos Litigation*, 52 F.3d 1124 (2d Cir. 1995), reversed a District Court order granting defendant judgment notwithstanding a jury verdict for plaintiff in a case involving colon cancer caused by spray-on asbestos fire proofing. The Second Circuit thoroughly reviewed Daubert and the trial evidence, and reinstated the jury verdict subject to a remittitur

related asbestos-containing products. However, its history as a miner of asbestos-contaminated vermiculite, the publicity about its ownership and operation of its facilities in Libby, Montana, and its distribution to ordinary consumers of vermiculite and vermiculite products carrying trace amounts of asbestos amphibole fibers had the potential to increase at least Grace's visibility, if not its liability, in the litigation.

B. The Front Line Defendants Confronted The Major Core Issues In The Litigation Through The 1990s, Allowing Others Like Grace To Collect And Use Valuable Settlement Related Intelligence Generated By Their Efforts

Dr. Dunbar's history concludes that the "...ACF [Asbestos Claims Facility] provided a relatively easy route to settlement and thus gave incentives for plaintiffs lawyers to find more claimants."³⁶ (Dunbar Report at p. 7.) It makes only passing reference to the role the ACF and its major share members played as front line defendants and emphasizes the impact of the Manville Trust and of the generally lower tier defendants who formed the Center for Claims Resolution ("CCR") after the ACF dissolved in 1988. But it was the front line defendants, including the ACF and, later, the ACF's major share members, who first grappled with issues like screenings, non-impaired claims and mass trials starting in the 1980's and whose actions, successes, and failures were most significant among defendants in shaping events in the decade and a half that followed.

The ACF succeeded Manville as the lead defense advocate in the asbestos litigation.³⁷ It was, by a very wide margin, the most powerful force in the litigation on the defense side between its formation in 1985 and its dissolution in 1988. Its members paid most of the settlement money that was then being poured into the system. It also tried a substantial number of cases. The ACF took on a campaign in the mid-1980's against mass screenings. Raymark, an early major front line defendant (which did not join the ACF), sued screening doctors and clinics on RICO theories in 1988. See Raymark Industries, Inc. v. Stemple, 1991 WL 100820 (D. Kan. 1991). Because it represented the majority of defendants in almost every case the

³⁶ Dr. Dunbar also reports that the ACF achieved its goal of keeping cases out of the tort system. (Dunbar Report at p. 7.) But the ACF was very much "in" the tort system and actually never realized its goal of providing an alternative to tort system resolution.

³⁷ Manville Corporation left the litigation when it filed bankruptcy in August, 1982. The Manville Trust, which first began accepting claims -- outside of the litigation -- in early 1988 and continued only until its supervising court took it back under court protection in 1990, has never been significant in the asbestos litigation. See the Trust's own version of its history at <http://www.mantrust.org/history.htm>. Academicians and trend watchers study the Trust's filing history because it is generally accepted that any claim filed anywhere against any defendant in the litigation also eventually will be filed against the Manville Trust. However, it is difficult to assess the significance to the litigation of administrative claims filings against a trust which is paying ten, now only five, cents on the settlement dollar.

ACF was very effective, and took the lead, in resisting consolidations and mass trials. It also directly confronted the substantial numbers of non-malignancy cases said to be "not impaired" that began arising in the 1980's. Almost a hundred of these cases were tried in Northern California alone during this period. When the ACF was unable to eradicate these claims it became the chief (and a very effective) proponent of claim deferral and warehousing mechanisms such as "green cards" (dismissal of a "non-impaired" case without prejudice coupled with a standstill on limitations of actions) and special dockets and registries for these kinds of cases.

The list of the conditions that caused the ACF break up in 1988 is very similar to the conditions described in the latter day history provided in the Grace expert reports. The ACF broke up in 1988 after waves of new cases with new types of exposures and of more marginal disease types began pouring into the ACF at twice historical rates³⁸ and as settlement demands and averages continued to escalate. The 21 former ACF members who later joined to form the CCR essentially were peripheral, small share defendants who resisted dissolution of the ACF. A few major defendants, including Owens Corning, Fibreboard Corporation, Pittsburgh Corning Corporation, Eagle Picher, Celotex/ Carey, and Keene Corporation, paid most of the ACF's liability shares. Most of these defendants quit the ACF, and it dissolved in 1988, at least in large part, because they could not survive in a facility not willing to confront the major issues in the litigation more forcefully. These major defendants needed to change the litigation to survive.

These front line defendants who formed the core of the ACF and then left it tried thousands of cases in the 1980's and 1990's in an *unsuccessful* effort to remake the litigation into what Grace's experts say it now has become.

Dr. Dunbar's history reports that Grace was the victim of "failed remedies," particularly after the Supreme Court's 1997 rejection of the CCR's class action global settlement, intimating that until that time Grace had managed to exercise control over its asbestos litigation problem. (Dunbar Report at pp. 12-13.) Perhaps things seemed under control from the perspective of the CCR defendants after their global class action settlement or for Grace until that settlement failed; but the experience of the major defendants who stayed in the litigation during these years was much different. They were trying most of the trials and paying the most to resolve cases. For them – as well as for the courts and plaintiffs' lawyers -- the litigation became significantly more challenging not long after the ACF dissolved and its course had little to do with decisions of the Manville Trust or actions of the CCR defendants.

³⁸ Stephen Tarnoff, New Avalanche of Asbestos Claims Hits, BUSINESS INSURANCE, May 25, 1987 at 1.

The situation of Owens Corning ("OC") provides one of the best examples of the lengths to which the major defendants went to defend themselves and how the litigation had reached threatening proportions and demonstrated its resilience long before the occurrence of the "watershed" events described in the Grace experts' version of this history. OC was the major asbestos defendant from the time of Manville's bankruptcy in 1982 through 2000. OC's stature in the litigation was almost equal to the combined sum of all shares of the 21 ACF members who later formed the CCR.

The details of OC's struggle are largely ignored by the Grace experts.³⁹ But the OC experience was very significant in the litigation in the 1990's and, among other things, shows just how valuable Grace's peripheral defendant shelter was and how much information about case values and litigation strategies and trials Grace received at little cost to itself during this period.

The following summarizes how dramatically OC's fortunes changed in the twelve years between its 1988 departure from the ACF and its resort to Chapter 11 in 2000:

In 1988, the year the ACF dissolved, OC reported 62,700 asbestos claims pending, of which 23,100 had been received in 1988.⁴⁰

After OC left the ACF, its annual defense costs peaked at over \$170 million in 1991, were \$90 million in 1999 (the last full year before OC's bankruptcy) and never fell below \$48 million in the years through 1999.⁴¹

By 1997 OC was reporting 173,800 claims pending, 40,000 of which it believed were the product of improperly administered pulmonary function testing, causing it to file two suits against screening clinics in 1996 and in early 1997.⁴²

³⁹ E.g., Dunbar Report at p. 11: "[Owens Corning]... on its own and together with Fibreboard, which it acquired in 1997, tried an array of alternative settlement structures after exiting the ACF. However, none of these... allowed ... [them] to efficiently resolve the mounting number of asbestos claims filed."

⁴⁰ Owens Corning 10-K for the year ending December 31, 1988.

⁴¹ Barnaby J. Feder, Finding a Lifeboat in a Flood of Litigation, NEW YORK TIMES, July 4, 1993; Affidavit of Gregory A. Peterson in Support of Defendant Owens Corning's Motion to Strike Punitive Damages ("G. Peterson Affidavit"), dated March 31, 1998; Owens Corning 10-Ks for the years ending December 31, 1998 and December 31, 1999.

⁴² Owens Corning 10-K for the year ending December 31, 1997.

In an affidavit filed in 1998 challenging the constitutionality of punitive damages verdicts OC stated that it had paid \$2.2 billion in indemnity overall, that juries had returned verdicts awarding over \$300 million **in punitive damages** in 78 cases, some of which were settled after verdict and before judgment, leaving 68 judgments entered against OC totaling more than \$179 million in punitive damages alone.⁴³

By 2000, the year OC filed for bankruptcy protection, OC already had tried hundreds of cases in the tort system. It reported that in 1999 it had paid \$770 million in indemnity and \$90 million in defense costs and that in 2000 its National Settlement Program ("NSP"), adopted in late 1998, covered 240,000 existing claims (as of its October 5 bankruptcy filing), that 36,000 claims were pending against it outside of the NSP,⁴⁴ and that the average cost of disposing of claims outside of the NSP that year was \$44,800, more than four times its settlement average in 1990.⁴⁵

OC left the ACF because it believed that its settlement share in the litigation had become too high. The litigation had changed such that it deemed the types of workers getting sick and bringing claims should be making claims against other defendants, against companies like Grace rather than OC. OC could not change its share materially under the ACF agreement and the smaller share members of the ACF would not support a program to OC's liking to confront these new claims.

OC's efforts to change the face of the litigation after 1988 went through several phases.

⁴³ G. Peterson Affidavit at p. 6.

⁴⁴ Owens-Corning 10-K for the year ending December 31, 2000. Forecast of Future Claims and Indemnity: Owens-Corning and Fibreboard, Thomas E. Vasquez, Ph.D., ARPC.

⁴⁵ Owens Corning's 1990 settlement average was about \$9,500 per case. Owens Corning 10-K for the year ending December 31, 1990. Viewed against the scale of OC's efforts to confront the core problems in this litigation, the CCR's 1993 global class action settlement – portrayed as a very significant event in Dr. Dunbar's report – is revealed as an astute maneuver by a substantial number of peripheral defendants (drafting on the efforts of major defendants in the litigation) to freeze their currently favorable settlement averages and reduce their risk of becoming target defendants by opting out of the litigation altogether through a Federal Court channeling injunction establishing a claims procedure. Dr. Dunbar's history notes that the CCR's global claims procedure for future claims had disease criteria (i.e., it compensated only those with "disabling asbestos related diseases...") (Dunbar Report at p. 10.) It fails to note that the 1992 settlement of "current" claims against the CCR did not have such criteria and that the CCR's channeling class permitted opt-outs. See Susan Koniak, Feasting While the Widow Weeps: Georgine v. Amchem Products, 80 Cornell L. Rev. 1045, 1053-57, et seq. (1995). Major defendants could not but view the CCR settlement as an adroit but not terribly friendly move rewarding, if not underwriting, plaintiffs in their prosecution of claims that others were working mightily to eliminate from the tort system.

In the first years after leaving the ACF, OC spent tens of millions of dollars to try to shift liability in the tort system from itself to companies like Grace and the members of the CCR. During this period the threat to peripheral defendants was not that plaintiffs' lawyers would "coach" product identification witnesses.⁴⁶ It was that OC would employ its infamous "picture book" to identify those defendants in discovery and implement its program of trials and settlements to enforce its insistence that plaintiffs get more of their settlement money from companies like Grace. This OC "outreach" program did not work, at least from OC's perspective. Peripheral defendants resisted it. Plaintiffs continued to sue OC, largely because they were comfortable with their case against OC, because OC had established a generous payment history, because of a run-on-the bank mentality that OC and other major defendants like it would not survive long⁴⁷, and – most ironically – because joining OC in a case insured that OC would apply its resources to build the product identification case against other defendants. OC's outreach efforts supplemented the plaintiffs' store of information identifying claims against others but also touched off increased trial activity that generated increased values generally and, perversely, hardened plaintiffs resolve against OC.

As it became apparent that its outreach program would not produce the desired result, OC found itself confronting plaintiffs more directly on the very issues being debated in this case: screening practices, no impairment cases, low dose exposures, cancer causation. It tried hundreds of cases – individually and in small groups – as part of a program to enforce its view of appropriate tort system valuation criteria similar to those that emerged in the CCR global settlement for "future claims" and that are now seen in the Grace expert reports. This program included trials of substantial numbers of non-malignant cases and produced very negative results for OC. Settlement values escalated. OC was inundated with large verdicts that included repeated awards of punitive damages, reducing OC to arguing to courts and to juries that no further punitive damages should be awarded in light of the enormous punishments being meted out. See G. Peterson Affidavit. These trial losses specifically informed defendants like Grace that they were not going to prevail on their

⁴⁶ Mr. Hughes expressed his concerns about "coached" product testimony in his deposition taken on July 19 and August 21, 2002 *In re W. R. Grace & Co. v. Sealed Air Corporation and Cryovac, Inc.* ("Hughes Sealed Air Testimony") and in deposition in this estimation proceeding. A newspaper story about "coaching" is cited as evidence of impropriety. See generally, Dunbar Report at pp. 26-29.

⁴⁷ Many of the original front-line asbestos companies declared bankruptcy between 1987 and the end of 2000: Nicolet, Inc. (July 17, 1987); Raymark Industries (March 18, 1988, with later filings for related entities); Celotex and Carey Canada (October 12, 1990); Eagle-Picher (January 7, 1991); H.K. Porter (February 15, 1991); Keene Corporation (December 3, 1993); and, Owens Corning and Fibreboard Corporation (Fall 2000).

non-impairment theories and that they certainly could not depend on the major defendants to eliminate those types of cases altogether. The cascade of adverse verdicts against OC drew more and more claims into the system as plaintiffs sought to share in OC's willingness to put its corporate net worth on the line to prove its point in the litigation.

In 1997, OC acquired Fibreboard, another major former ACF defendant. In December 1988, OC announced its National Settlement program which is discussed briefly in Dr. Dunbar's report at pp. 10-11. The NSP, like the CCR global settlements, attempted to purchase – with money paid in settlement on current claims – a commitment⁴⁸ to stricter settlement disease and exposure criteria covering future claims. In the end, the NSP price was too high. OC could not afford it. Dr. Dunbar observes that the year 2000 claims surge Grace experienced was just one more development that "could not occur if claims were purely driven by epidemiology" (p. 47), implying that the surge had an illicit source. The actual source is not difficult to describe. The year 2000 surge undoubtedly related in large part to the enormous infusion of cash promised by OC's NSP and the extended discussions between OC and plaintiffs' lawyers as rumors multiplied that OC was nearing the end of its financial resources.

OC's experience was a high profile example of what major defendants went through during this period and illustrates a number of additional disagreements I have with conclusions advanced in the Grace expert reports.

No one in the litigation seriously advocates that all claims should be brought as soon as they are medically manifested.

Major defendants like OC have been the first to feel the impact of periodic claims "surges" that so fascinate students of this litigation. Dr. Dunbar's report emphasizes repeatedly that the fact that claims "surged" from time to time shows that claims were not being filed as might be expected from normal disease manifestation. He suggests that this, in turn, is probative of illicit manipulation by the trial bar.⁴⁹ I disagree. All sides – defendants, responsible plaintiffs' lawyers, and courts alike – have cooperated over the years in different attempts to shield the litigation from serious consequences if claims arose in the litigation as soon as they medically manifested. It was defendants, not plaintiffs, who took the first steps on this path. Dr. Dunbar describes adoption of suspense dockets (e.g., in New York) as a part of the

⁴⁸ "Agreement" would be too strong a term to use here since plaintiffs' lawyers never were in a position to make binding promises of this sort on behalf of clients who had not yet retained them.

⁴⁹ Descriptions of surges appear throughout the Dunbar Report at pages 21 and 22 for example, he observes that filing surges are "inconsistent with a system in which medical factors drive claims" and that they are "inconsistent with the medical development of asbestos-related disease."

new wave of tort reform at the state level (Dunbar Report at pp. 53-54). But, the ACF long ago had been successful in getting plaintiffs to accept green cards and in establishing pleural registries and suspense dockets.⁵⁰ The resort to these devices and others like them⁵¹ relieved pressure in the litigation in the short run. But in doing so all sides implicitly recognized that these – mainly “non-impaired” – claims had not been and could not be eliminated from the tort system categorically, legitimized a process where marginal claims could be “undocked” (i.e., suspended or warehoused) from their manifestation medically, and embraced at least a significant likelihood that those claims would emerge or re-emerge if and when plaintiffs lawyers concluded that doing so became the right thing to do in the interests of their clients.

In the 1990's many of those claims in fact emerged as trial results pushed big defendants near insolvency and as major events creating fire sale urgency – e.g., global settlements, large consolidations promising to move claims that had been languishing on dockets for years, and significant settlement programs sponsored by near insolvent major defendants – put plaintiffs to “use it or lose it” type choices. All those surges included good and bad claims.

Claims filing surges ebb as well as flood such that true filing trends need to be measured over multiple years. When cases back up on a court docket as conflicts between lead defendants and plaintiffs bubble over into a series of trials in order to reset settlement values, plaintiffs' lawyers may defer new filings awaiting better information about whether the particular docket in question ever will be able to accommodate their new claims. A significant large group settlement or trial promising to clear the same docket can reverse the process, creating a surge in a given month or year.

After OC unsuccessfully fought plaintiffs in trial across America for the better part of the decade of the 90s, it announced its NSP in 1998 and spent \$770 million in the next year alone under this program. This settlement, in and of itself, signaled that dockets everywhere would be cleared of OC cases and provided more than enough financial incentive for all plaintiffs' firms to activate their entire warehoused inventory of

⁵⁰ Report of the Judicial Conference Ad Hoc Committee on Asbestos Litigation (March 1991) at 25-26. The creation of the asbestos MDL in 1991, another docket control mechanism supported by defendants, inaugurated very significant controls over cases in the Federal system, affecting fully one-third of the cases then pending in the tort system. However, the MDL transfer also caused a migration – another “surge” – of pending cases off of Federal and onto state dockets

⁵¹ In 1979, California amended its limitations on actions rules to permit plaintiffs to defer – often indefinitely – filing asbestos claims for non-disabling diseases. See Cal. Code Civ. Proc. § 340.2. Other states adopted “two disease” regimes under which failure to sue on a non-malignant disease did not bar later suit on a malignancy. PA: *Marinari v. Asbestos Corp.*, 417 Pa. Super. 440, 612 A.2d 1021 (1993); TX: *Pustejosky v. Rapid American Corp.*, 35 S.W. 3d 643 (Tex. 2000); CT: *Sheppard v. AC&S, Inc.*, 2005 WL 1433875, 39 Conn. L. Rptr. 384 (2005)).

claims, including the good ones and the marginal and not good ones. This undoubtedly explains, at least in part, the increased filings Grace experienced in 2000. But the fact that this surge included claims Grace's experts have labeled as "bad" does not prove that all screened or all "non-impairment" claims lack value in the tort system. In this case it in fact proves just the contrary. OC had done its best to challenge all of these claims and, in the end, had to acknowledge their value by a NSP design that paid the pending ones in exchange for a non-binding commitment that plaintiffs would defer to disease criteria in their future filings.

OC's decade of travail followed by its NSP settlement effort in the late 1990's helps explain these end-of-decade filing surges. It also aids in understanding why these surges and filings were not the last chapters in the litigation for controversial claims. OC's experience is a major reason why I conclude that defendants who are pushed to take OC's place as targets in the future will face the same types of problems.

Good worker health screenings have a place in occupational litigation.

The medical and technical experts on both sides in asbestos cases, including this one, rely heavily on the extensive data available on the subject of asbestos disease. Much of that data is the product of worker health screenings. Good screenings promote health and safety and advances in medical science. Bad screenings create problems for courts and major defendants (but, strangely enough, may provide opportunities for others defendants).

Screenings of asbestos exposed worker populations- by other than "treating" physicians and technicians -- have been going on for over 70 years. Johns Manville screened its plant workers across the country in the 1930's. The problem with Manville's screenings was not the fact of the screenings but Manville's unwillingness to reveal the results to its diseased plant workers. For years defendants have urged courts to consider the favorable results produced by the first large scale screening in the United States of shipyard insulators. (1945: Fleischer, Viles, Gade and Drinker, A Health Survey of Pipe-Covering Operations in Constructing Naval Vessels, 28 J. Indus. Hyg. 9-16). No one criticizes Mt. Sinai's screenings of Heat and Frost union members (insulators) in the 1950's and 1960's that precipitated Dr. Selikoff's revelations that exposed the true enormity of this health problem, viz: that over 27 million workers had been occupationally exposed. Screenings after the Mt. Sinai studies covered a number of trades (sheet metal workers, tire workers, railway workers) other than shipyard insulators and were the basis for filings in the 1980's. These were the new filings that so challenged split the ACF. The screenings that contributed to them were the subjects of early opposition by the ACF. Raymark also filed lawsuits against the screeners. See Raymark Industries, Inc. v. Stemple, 1991 WL 100820 (D. Kan 1991).

Following on the measures taken by the ACF and Raymark, OC filed two major lawsuits against screening entrepreneurs in the 1990's. Owens-Corning v. Pitts, No.

96-2095 (E.D. La. 1996) and *Owens Corning v. McNeese*, 3:97 cv29WS (S.D. Miss 1997). The lawsuits were directed against the alleged fraudulent practices of the screeners, not necessarily the fact that screenings had occurred.

Included among the things the parties learned in the course of these screening conflicts was that many of the products of these screenings – principally “non-impaired” claims – eventually would find their way to trials where juries would award damages on facts that the defendants had maintained – as Grace does now – were fraudulently manufactured and/or could and should not support a recovery. Grace’s experts now examine the products of recent screenings, find that they fall below prescribed standards, and declare the claims valueless and the screenings fraudulent. But the lesson learned from the intense trial activities of the 1990’s is that juries and presiding judges may – and often do -- disagree with this assessment.

The reason for this is simply that, contrary to the conclusions in some of the Grace expert reports, the asbestos tort system has not yet provided a bright line lower limit on the definition of “injury” for claimants who can prove asbestos exposure and produce a medical report diagnosing a related ailment. The uncertainty this creates in the litigation is not the boon to plaintiffs’ lawyers the Grace expert reports would suggest. It often is just as challenging for those representing plaintiffs as it is to defendants. Plaintiffs lawyers clearly prefer the rewards and returns available from prosecuting mesothelioma cases over the struggles and uncertainties associated with non-malignancy cases, especially in a tort system obsessed with controlling its costs and populated with defendants threatening soon to run out of money to pay claims.

It also is easy to lose sight of the opportunities these types of situations created for peripheral defendants in the 1990’s. OC and others were spending millions suing screening companies and revealing questionable diagnostic practices by unscrupulous physicians. Grace’s managers knew about these claims and in evaluating their merits called them “junk.” (Hughes Ex. 168 (BOCAS 5-9; Feb. 7, 1995.)) In the asbestos litigation the term “junk” is roughly synonymous with “cheap.” For OC eradicating these claims was a matter of do or die. For Grace, resolving these claims was a matter of price – and the price was cheap because through OC’s efforts defendants like Grace were fully equipped with facts to present in negotiations with plaintiffs that, in trial, Grace would prevail in these cases a substantially greater percentage of the time.

The decision whether to screen workers for asbestos or other occupational diseases has been and should be in the first instance a personal/medical one for the worker. Those workers who choose to be screened also can choose to use the results in making claims for workers compensation benefits or in third party litigation in the tort system. The experience of OC teaches that if fraudulent screeners are effectively prosecuted – and I believe the necessity to do so will continue in the future -- then the

asbestos litigation will be left with screenings that still will produce controversial cases, albeit ones from more trustworthy sources.⁵²

The courts and parties learned from experimenting with trial structures – including so-called “mass trials” -- what works and what does not work to move asbestos cases across crowded dockets.

OC was active throughout the entire period, roughly 1985 through the mid-1990s, when courts were experimenting with large scale consolidations – “mass trials” – as a way to deal with calendar congestion. Early in the litigation, especially before the Johns Manville bankruptcy filing in 1982, defendants were quite successful in enforcing traditional docketing and trial setting practices that required courts and juries to hear individual cases one at a time. Defendants successfully resisted streamlined trial dockets,⁵³ consolidations of any sort, liberal joinders, or liberal application of claim or issue preclusion short cuts like collateral estoppel. But defendants also joined with plaintiffs and courts in streamlining discovery and pre-trial procedures as ways to avoid – or at least defer to a time closer to trial – the huge costs associated with individual case preparation in lawsuits each of which might have as many as 40 to 50 defendants. Thus, as early as the mid-1980s, all sides were confronting the congestion created by a litigation that could take in and process new cases more efficiently but that was bound by a more traditional, deliberate process – individual jury trials – for their final adjudication. This caused trial courts to search for alternatives, not as ways to favor one side or the other but to clear their increasingly crowded dockets.

The 1985 *Jenkins* proceedings (a “liability only” class action of already pending claims) in Texas is one of the earliest examples. *Jenkins* was not the creature of a Texas state court presided over by a judge elected annually in county elections. It was in a Federal court, presided over by a jurist, Judge Robert Parker, with Article III tenure who later was elevated to and served on the Fifth Circuit Court of Appeals. *Jenkins v. Raymark Industries, Inc.*, 109 F.R.D. 296 (E.D. Tex 1985) Defendants as well as a significant number of plaintiffs criticized the *Jenkins* format. Nevertheless,

⁵² A more detailed recounting of screening issues is set out in Exhibit B

⁵³ Historically, some defendants favored deferring trials for as long as possible. Other defendants sought to achieve the same result by influencing the structure of trials. Defendants whose case was weak on some but strong on other issues would seek to “reverse bifurcate” the trial, i.e., advocating trying the issues on which their defenses were strong in a first phase (where they might win) and deferring – perhaps indefinitely – at trial on issues they expected to lose. Defendants facing bad facts on liability might seek to obtain a first phase trial on causation, injury or damages. Defendants with strong product identification defenses might move for an early trial on exposure, a motion that likely would be opposed by defendants with weaker product identification defenses as well as by plaintiffs. While these sorts of strategies deferred settlements or led to good deals in the short term, they built up tremendous pressure for consolidation or mass trials.

the Fifth Circuit upheld Judge Parker's *Jenkins* trial plan when it was challenged. *Jenkins v. Raymark Industries, Inc.*, 782 F.2d 468 (5th Cir. 1986).

From the point of view of the beleaguered asbestos judge, the Jenkins model was a way to identify certain issues with a common factual nexus and deal with them more efficiently by trying them in a large group of cases at once. From the point of the view of the defense, however, Jenkins was perverse as it isolated for early trial liability issues many defendants thought they surely would lose. Still the Jenkins plan to focus on liability issues as being "common" across a large group of cases probably was the only trial aggregation design available that avoided the vice of spurious consolidation of individual issues across a large number of cases.

From the point of view of the presiding judge, Jenkins also had the virtue of creating an atmosphere that heightened party incentives to settle, a way to clear, the backlog. Experienced trial judges believe that cases generally do not settle if there is no prospect of a trial. By accelerating the prospect of a trial on some, supposedly common, issues but deferring finality on individual issues (exposure, proximate causation, extent of injury, damages) Jenkins left defendants uncertain whether they could continue to rely on a leisurely trial process and left plaintiffs uncertain when their cases might actually reach judgment through trials on the discrete individualized issues that remained after the "liability" determination. It also left plaintiffs uncertain how those issues would be decided by subsequent juries who had not also heard inflammatory liability facts. The uncertainty and lack of finality built into the Jenkins "liability class action" model promoted settlement and as a result, most defendants – including those in the then newly formed Asbestos Claims Facility – settled the Jenkins cases.

After *Jenkins* the ACF, with its substantial economic clout in the litigation, was successful while it operated in staving off mass consolidations, although pressure still continued in many courts for continued consolidations of small groups of cases as a way to streamline processes. But when the ACF dissolved, and its the major members reemerged into the litigation each with its own imperatives to remake the system into something it could survive, the litigation literally ground to a halt in many courts. As matters deteriorated on court dockets across the country the Chief Justice appointed a special committee of the Judicial Conference of the United States to examine the growing problem. The Committee was comprised of federal judges with significant asbestos experience. In March 1991, the "Rehnquist Committee" issued its report which labeled the litigation an "impending disaster"⁵⁴, and recommended a

⁵⁴ The Committee found the litigation situation had reached critical dimensions and was getting worse. It was "a disaster of major proportions to both the victims and the producers of asbestos products, which the courts are ill-equipped to meet effectively." The report cited estimates of 265,000 asbestos deaths by 2015 and reviewed the familiar and objectionable aspects of the litigation: Dockets continued to grow, delays were routine, and the same issues were litigated over and over again. For

comprehensive national Congressional solution. As a back up position, *the Committee recommended that Congress expressly authorize consolidation and collective trial of asbestos cases.*⁵⁵ Report of the Judicial Conference, Ad Hoc Committee on Asbestos Litigation (March 1991) at 36.

As the Rehnquist Committee issued its report, the federal Judicial Panel on Multi District Litigation had under consideration the sixth request (five earlier petitions had been rejected) to centralize the federal cases for pretrial proceedings. In July 1991, the JPMDL did order the federal cases transferred to the Eastern District of Pennsylvania (Judge Weiner). *In re Asbestos Products Liability Litigation* (No. VI) 771 F.Supp 415 (Jud. Pan. Mult. Lit. 1991). The MDL transfer had the effect of dramatically reducing the number of cases filed in the federal system and the correlative impact of shifting the burden to – creating a “surge” in – the state courts. State judges saddled with cases that would otherwise have gone to the federal courts thus faced aggravated problems of docket congestion and delay – increasing the pressure to use innovative mass and consolidated resolution techniques of the very type lauded by the Rehnquist Committee.

In Exhibit C I have listed and described the characteristics of some of the so-called mass trials conducted by courts dealing with the congestion caused as the major defendants struggled in their, now individual, efforts to gain control over their asbestos problems. The congestion was severe and not just the result of screenings or rapid movement of cases across jurisdictional lines. For example, when Grace's insurers complained in hindsight that Grace's group settlement with the Reaud firm in Texas seemed to move cases too quickly, Grace properly pointed out that the cases being settled had languished on dockets and in litigation for as many as 11 years. (Hughes Arb. Deposition at pp. 130:17-31:14.)

each case resolved in the federal system, nearly two were being filed – backlogs were growing. Report of the Judicial Conference, Ad Hoc Committee on Asbestos Litigation (March 1991) at 2-3.

⁵⁵ The Committee noted that trial consolidations were in use and finding appellate favor, but that, “Local consolidation of cases for trial under existing rules has not provided a long-term solution to the asbestos problem.” The authors concluded it was unrealistic to believe that individual trials could provide relief. “Virtually every federal judge who has tried to cope with a substantial asbestos docket agrees that this litigation impasse cannot be broken except by aggregate or class proceedings . . .” but “courts of appeals have generally not been amenable to class actions in mass tort cases”. The Committee recommended use of offensive collateral estoppel to avoid repetitive litigation of the same issues. The committee recognized inactive dockets as a mechanism for handling “non-impaired” claims, citing those of Judges Zobel (Mass.), Spencer Williams (Hawaii) and Lambros (Ohio). But the Committee observed that such dockets may not be possible because “state law recognizes the validity of these “non-impaired” claims”, noting that in a number of states fear of cancer was recognized as a compensable injury . . .” Report of the Judicial Conference, Ad Hoc Committee on Asbestos Litigation (March 1991) at 26.

In the end, as Exhibit C shows, neither the Jenkins model nor many of the mass "trials" that followed it actually adjudicated a large number of cases to finality. Like an experimental aircraft designed to take off but with no ability to land, large group trials could decree common issue liability but had no ability to resolve individual issues in thousands of cases. Thus "mass" or "common issues" trials characteristically adjudicated only a few individual cases in their entirety. But these experiments -- with all of the uncertainty and anxiety surrounding them -- did cause parties, including Grace, to settle cases. And they have left courts everywhere more comfortable with asbestos trial consolidations on a smaller scale -- five to fifteen cases with common factual elements with certain issues having been significantly pre-tried -- as a compromise solution to help the trial processes to maintain a pace that was less disparate from the rate at which new cases were being accepted. And though most courts had turned away from using mass consolidations by the late 1990s, those trial designs that adjudicated liability only as a "common" issue found favor in some appellate courts⁵⁶ proving their legitimacy and preserving them as potential management tools to clear future dockets.

By the time of the defense debacle in Mississippi⁵⁷ -- which was not so much the product of a mass trial as it was the result of small group consolidation coupled with a mass joinder -- almost all courts had stopped use of large consolidated trials as an option to clear their dockets. In fact, most would agree that one of the major reasons Mississippi occurred at all is that Texas state courts had discontinued the practice and the Texas legislature had raised jurisdictional bars for importation of cases from other states. There is no question that the Cosey verdict in Mississippi in 1998 drew a great deal of public attention, is generously cited as an example of asbestos litigation abuse and is credited for affecting national attitudes about the litigation and motivating reforms in some states and attempted reform in Congress. Had Congress acted after 2002 to impose national disease criteria on the litigation (H.R. 1737 108th Cong. 2003) or to eliminate the asbestos litigation altogether (S. 852, 109th Cong. 2005) there would be no doubt as to whether attitudes had undergone a quantum and permanent shift.

But national legislation did not pass, and in an evolving political environment where various tort reforms have been enacted in some but not other jurisdictions, the most telling lessons to be learned from the Mississippi experience include that the lawyers representing asbestos claimants are creative, persistent and effective in pursuing recoveries for their clients. Before 1997, Mississippi was generally not

⁵⁶ E.g., *Jenkins v. Raymark Industries, Inc.*, 782 F.2d 468 (5th Cir. 1986), *AcandS v. Abate*, 710 A.2d 944 (Ct. Spec. App. Md. 1998), *Appalachian Power Co. v. MacQueen*, 479 S.E. 2d 300 (W. Va. 1996).

⁵⁷ Grace was not a party at trial in the much-publicized Mississippi trial group, Cosey.

considered to be a significant source of liability in this litigation. The first Cosey verdict of \$48.5 million was not the result of a mass trial. The verdict was entered in twelve individual cases, most of which involved non-malignancy diagnoses disputed by the defense. It illustrates a result that might occur in hundreds of other obscure courts in obscure counties not affected by relevant tort reform.⁵⁸ The Cosey impact – importation into Mississippi of cases backed up on dockets elsewhere – illustrates how creative the trial bar will be in optimizing its choices in the future and how quickly the trial bar is prepared to respond when opportunities like these present themselves.

C. The Grace Claims History Shows It Tried And Settled Cases Effectively Within Tort System Constraints

In my opinion, Grace claims managers understood the data, comprehended the workings of this market, used the system to their client's advantage in bargaining where they could, and avoided risks through settlement in much the same way as did other comparably situated defendants. The results of their efforts, expressed in settlement averages segmented by disease, workplace, venue and the like, reasonably evaluated and resolved actual tort system liabilities that Grace faced.

1. Grace had capable and knowledgeable litigation managers and was well-organized and supported to manage its defense.

Although it had insurance coverage, Grace limited costs by managing its defense in-house throughout the decade of the 90's up to the time of its entry into bankruptcy. By the early 90's Grace's primary insurance coverage (i.e., the layer of

⁵⁸ During the 1990s, Mississippi applied very liberally construed joinder and venue rules resulting in joinder of many cases in certain counties selected by plaintiffs precisely because trial in those counties posed enhanced risk to defendants. Thus, the Cosey case was filed in 1995 and within four years included several thousand plaintiffs and over 200 defendants. However, joinder of thousands of plaintiffs on the pleadings was not the same as consolidation for trial. In 1998, a group of 12 of the Cosey cases was tried. This small group verdict led to a wave of settlements by defendants who recognized that they, too, would face a series of small group consolidated trials. At least 19 large scale settlement agreements were entered into by defendants including the CCR, Halliburton, Kaiser, Combustion Engineering, Owens -Illinois, OCF, Fibreboard, Uniroyal, Babcock and Wilcox, Georgia Pacific, Westinghouse and W.R. Grace. Eleven of those settlement agreements totaled some \$400 million. See, e.g., *Huber v. Taylor*, 469 F. 3d 67 (3d Cir. 2006) (allowing case by "Northern" clients to proceed against certain of the lawyers involved). Subsequently Mississippi judicial decisions announced a rule limiting joinder. See, e.g., *3M Co. v. Johnson*, 895 So.2d 151 (Miss. 2005). Although this rule makes massive proceedings impossible, it allows for small group trials of asbestos cases -- as has been the practice in federal and state courts for over 20 years. And, while recent Mississippi decisions also show an increased willingness to use forum non conveniens analysis to dismiss cases brought by out of state plaintiffs, the decision remains discretionary based on a multi-factorial analysis. See, e.g., *3M Co. v. Johnson*, 926 So.2d 860 (Miss. 2006) (18 cases against 3M dismissed on forum non conveniens grounds)). Dismissal on such grounds does not necessarily mean a case cannot or will not be prosecuted, only that it will not proceed in Mississippi.

IV. TORT REFORM IN SOME STATES HAS NOT TURNED THE TIDE IN THE NATIONAL ASBESTOS LITIGATION

I disagree with Dr. Dunbar's conclusion that recent tort reform in some states has caused the litigation to reverse course, especially with regard to low value claims.

Dr. Dunbar is persuaded that the across-the-board reduction in asbestos filings against all defendants starting in 2003, a year before Judge Jack's opinion in the silica litigation, and continuing through 2006 "bears out" the "expected impact" of the tort reform in various states described elsewhere in his report.⁹⁸ Dr. Dunbar relies on selected public company filings to conclude that there was "a general decline in claims for all companies since 2003." (Dunbar Report at p. 69.) Among other things, his report relies on a July 2006 press report from Madison County, Illinois – termed a "hell hole" jurisdiction by some authorities cited in the report – that asbestos filings had continued to fall even there after reaching a peak in 2003.⁹⁹

Across the board filing reductions *of all kinds of claims* in the litigation cannot be explained by tort reform measures in some states aimed to inhibit filings of *certain kinds (i.e., low value) claims*. There is a much better explanation for the across the board 2004-2006 claims reductions, one consistent with the view that claims will reemerge notwithstanding occasional tort reform in some states. In August 2003, the Republican Chair of the Senate Judiciary Committee, Arlen Specter, stated his support for the Fairness in Asbestos Injury Act (FAIR¹⁰⁰), national legislation that would have eliminated – top to bottom – the asbestos tort system and replaced it with a national administrative claims process.¹⁰¹ Asbestos defendants had been unsuccessfully seeking federal tort reform legislation since before Johns Manville's bankruptcy when Congresswoman Millicent Fenwick of New Jersey – then Manville's headquarters state – had first sought Congressional action. But the situation in 2003

⁹⁸ Dunbar Report at pp. 68-69; "Following Reforms, Aggregate Filings Have Slowed"; an "expected impact of the recent reforms" perhaps reflecting attorney decisions "...to pass on the low-benefit cases..."; all as "borne out" by "a general decline in claims for all companies since 2003." Dr. Dunbar, for example, points to tort reform in Mississippi as one example how claim values there have been significantly reduced. Dunbar Report at pp. 55-61. But, the Mississippi venue rule changes have done nothing to eliminate dangerous, small group consolidated trials of the type that resulted in the Cosey verdict.

⁹⁹ Asbestos cases continue to drop in Madison County, The Madison St. Clair Record, July 7, 2006.

¹⁰⁰ S. 1125, 108th Cong. (2003)

¹⁰¹ See, Hanlon and Smetak, Asbestos Changes, NYU Survey of American Law, 62 NYU L.Rev. 525, 580 *et seq.* (2007). The authors were counsel to FAIR Act proponents and their firm is successor to the firm that formerly represented the CCR.

was different. There was bipartisan Senate Judiciary Committee support for this FAIR Act legislation in a Congress still controlled by Republican majorities. And prospects for passage were boosted further by announced Presidential support for national asbestos tort reform. All this caused the asbestos trial bar seriously to consider – for the first time ever – sweeping national asbestos tort reform that seemed imminent and likely.

And the legislation was sweeping. It not only eliminated all cases of any kind in the tort system and imposed more defense friendly disease criteria (effectively cutting off all marginal claims and even lung cancer claims of smokers when not accompanied by a diagnosis of asbestosis), the claimant benefit schedule limited payouts on claims at all levels and cut deeply into lawyer contingency fees. The legislation also would have eliminated all § 524 trusts, a potential source of "seed" funds for plaintiffs to use in prosecuting their third party claims in the tort system, and would have confiscated all assets of those trusts in order to help fund the \$140 billion said to be needed for the national trust. Legislative maneuvering over FAIR Act passage had attorneys for plaintiffs and defendants biting their nails for almost two years, well into 2006 when the results of November, mid-term, Congressional elections settled to everyone's satisfaction that national tort reform legislation once again would not pass.¹⁰²

The effect of FAIR's potential imminent passage on the asbestos trial bar was comprehensive. Plaintiffs firms cut back their asbestos practices – especially their investments in and investigations of new cases – significantly and new filings dried up. Now that it is known that FAIR will not pass the question in my view is not whether tort system claims at all levels will reemerge but when the process of plaintiff lawyer reinvestment and investigation will refill the new claim pipeline so that filings will recommence. The question already has been answered in Madison County, where the local press has reported a resurgence of claims there.¹⁰³

The experience of the 1990's has had its effects on the litigation, however. Plaintiffs firms have become much more aggressive and sophisticated in finding and in not hoarding new cases but in referring them to lawyers who can demand the best values in jurisdictions that will accept the claims and return the best results. Availability of the internet has supercharged both of these processes significantly. The competition among plaintiffs lawyers for mesothelioma claims has become very intense, nearly guaranteeing that all mesothelioma cases will find their way into

¹⁰² Hanlon and Smetak, *supra*, at 583.

¹⁰³ "After a three year decline in the number of asbestos lawsuits filed in Madison County, new complaints are on the rise in 2007... As of June 30, 227 asbestos cases have been filed here, and a vast majority of them are complaints from out-of-state plaintiffs." Judges not worried about Madison County asbestos upsurge, The Madison St. Clair Record, July 26, 2007.

competent hands and that these plaintiffs will suffer less than before from the averaging effects of blanket group settlements. Mass trials may be a thing of the past as are mass movements of claims. However, most courts now are more comfortable with modest sized trial consolidations and, as already stated, the common issue partial mass trial genie is not entirely back in its bottle. And work already is underway identifying the new asbestos lead jurisdictions of the future. A heavily populated state like California, one of the jurisdictions attracting increased attention, conceivably could accommodate thousands of claims because of the multiplicity of California's asbestos jurisdictional "contacts."¹⁰⁴

Although the case has not been made that non-impairment claims have been eliminated altogether, when and how many of these claims will reemerge is more difficult to predict. Investment returns on those cases are lower for plaintiffs than for, e.g., cancer cases. Also delays are greater in filing and in reaching settlements in these cases because of the continuing conventions that permit and even encourage deferring filing of these cases. Relevant also is the fact that many of the new defendants being brought into the system are not as vulnerable to these kinds of cases. Plaintiffs with automotive brake, clutch plate or gasket "very low dose" asbestos exposures are much less likely to bring suit in these cases. But this good news for these very low dose defendants likely would be bad news for Grace had it stayed in the litigation. Grace did make and distribute products that will support recoveries in cases like this. In a future tort system it would have fewer tort system codefendants with which share those liabilities. Thus, had Grace remained a defendant in the evolving asbestos tort system, plaintiffs would have been able to finance initial work up of their marginal cases out of settlement trust recoveries and then target Grace as one of a lessening number of defendants who could be sued in cases of this sort.

The number of non-impairment claims that reemerge and when that will take place will depend on a rebuilding sequence that echoes the past, albeit with the following modern overtones: 1) the extent to which internet claims acquisition and referrals reach these types of claims; 2) when any of the several alternative jurisdictions now being actively explored by plaintiffs lawyers will prove to be hospitable to non-malignant filings; and 3) which firms, building on capital accumulated in prosecuting higher value claims, will invest its resources in prosecuting these types of claims as part of a practice, for example, of submitting such claims for compensation by various bankruptcy-created trusts.

¹⁰⁴ Hanlon and Smetak, *supra*, was published shortly before the date of Dr. Dunbar's report. It parallels much of Dr. Dunbar's historical account and his views regarding tort system abuse. Nonetheless, they concluded that it is impossible to declare "victory" noting that "it is highly doubtful that the current balance will last indefinitely" because "the asbestos litigation system is currently in the process of sorting out values." *Id.* at p. 600. They note, correctly, I believe, that the underlying economics and the "structure of the American court system tends to keep the cycle going." *Id.* The authors point to Los Angeles as one attractive new forum. Footnote 292.

OC and the other major defendants spent hundreds of millions in defense and indemnity dollars trying to accomplish the same objectives the Grace expert reports now say have been accomplished through no more than a sudden realization of core flaws in the tort system that dawned after Grace's bankruptcy filing. But nothing that has been revealed since Grace filed bankruptcy would be news to the managers of the ACF and the large defendants like OC, who were aware well before 2000 of issues like inter-B-reader variability, movement of claims across jurisdictional boundaries, recoveries in non-impairment claims, consolidated trials, and excesses of certain screeners and doctors. All of these issues were challenging and viable issues in 1986 and 1996. In my opinion the case has not yet been made that they will not remain viable and just as challenging in the tort system in the future.

V. INDIVIDUAL CLAIMS FILES DO NOT SUMMARIZE ALL AVAILABLE EVIDENCE; HIGH COSTS AND INFORMATION OVERLOAD HAVE CAUSED THE PARTIES TO LIMIT THE INFORMATION RETAINED IN INDIVIDUAL CLAIM FILES

Stakeholders in this litigation long ago realized that the litigation would grind to a halt if all courts and all parties collected or maintained individual case files that contained all information relevant to each case. Court rules, party conventions, such as claims processing procedures in large group settlements, and computer and imaging technologies all come to bear in reducing the day-to-day aspects of this litigation to manageable proportions. "Asbestos personal injury cases are mature mass torts because so many have been tried before so many different juries that the trials are quite routinized and the outcomes are generally predictable. For these cases the trial process is more of a case flow mechanism than a procedure for determining liability, causation, and damages."¹⁰⁵

Courts with loaded asbestos dockets have issued rulings against burdening court staff or files with, e.g., discovery demands or responses. Parties retain these until needed in trial or motion practice. With 30 to 40 defendants sued in each case, plaintiffs typically have obtained orders requiring them to respond only to limited

¹⁰⁵ Francis E. McGovern, The Defensive Use of Federal Class Actions in Mass Torts, 39 ARIZ. L. REV. 595, 607 (1997). And see, Francis E. McGovern, Resolving Mature Mass Tort Litigation, 69 B.U. L. REV. 659, 689-94 (1989). In its formative stages, a mass tort often involves individualized litigation as plaintiffs and defendants work through the issues of liability, general causation, and the like. This stage of the litigation involves very high costs for both sides. Plaintiffs' lawyers must build the case against the defendants through extensive discovery and expert testimony. Defendants must conceive and test defenses in trial. There comes a point, however, when this intensive litigation generates a metric for evaluating cases. After this point, trials become relatively rare, and virtually all cases are settled on the basis of essentially administrative procedures. Professor McGovern calls this stage "mature." Francis E. McGovern, The Defensive Use of Federal Class Actions in Mass Torts, 39 ARIZ. L. REV. 595, 607 (1997)

other medical sources. The result: cases can and will be settled on the bare bones medical case file records, unadorned by the results of the much more comprehensive trial preparation measures that otherwise would be needed to take the case to a jury. The trial win-loss record, a measure of the forensic margin of error in these claims files, establishes – as occasionally readjusted through further individual trial activity -- the settlement price to be paid for non-malignancy claims that remain active, i.e., that are not otherwise in repose on suspense dockets, yet to be filed in a plaintiff lawyer's back room long-term inventory queue, or in green card¹⁰⁷ cold storage.

The evidentiary equation established in the 1980's on medical issues was different than on other, e.g., product identification, issues mainly because of the high expense – especially when applied to thousands of cases – to all sides of any incremental development of case specific medical information. This was particularly acute for peripheral defendants watching their costs which anticipated paying only a small share in settlement – and rarely anticipated trying cases – and therefore had strong incentives to “free ride” on and make do with the medical work-up of larger, front line defendants.¹⁰⁸ Overall, though, the result for medical claims file information has been the same as with product identification and exposure claims file information. *The individual in process plaintiff's case file, without more, does not reflect how the claim will be presented at trial.* Those case files only are developed to a limited point, a convention that is the result of an economizing-driven and often judicially regulated medical information détente between plaintiffs and defendants in cases, such as these, where medical issues were repetitive and the outcomes are predictable.

Thus, material found in individual claims files *in process*, when married with the data available in central repositories, can inform managers about the value of claims for settlement purposes. But it is not adequate for trial and will not stand up to trial – like scrutiny without considerable updating and more intense work, including resort to centrally held data. The Grace-prescribed criteria require trial-like exposure and medical evidence. A more meaningful review of Grace's historical results at this level of detail would be a review of trial evidentiary records accompanied by an evaluation of the verdicts which resulted in the litigation before bankruptcy.

¹⁰⁷ Green cards are described at pp. 36-37 of this report.

¹⁰⁸ Indeed, before Manville's bankruptcy in August 1982 virtually all other defendants free rode everywhere off Johns Manville medical work-ups. Similar regimes existed while the ACF, which paid well over most settlement dollars in most jurisdictions, was active in the litigation.

VI. CONCLUSION

So far there has been no rewind button in the asbestos litigation. Grace's historical claims, trial and settlement data are expressions of the sum total of Grace litigation management decisions and its evolution as a defendant in the litigation for over two decades. If as a current, viable tort system defendant Grace today abruptly sought to turn away from this history, to turn back the clock or change the rules along the lines now proposed by its experts to improve its liability picture, it would be throwing down the same gauntlet defendants like Owens Corning threw down 19 years ago. It could and should anticipate a similar response. Its justifications for rejecting its history would have to be either that its managers were incompetent or poorly informed or that circumstances had changed so radically that a new set of rules now will apply.

My conclusions, summarized in part I of this report, reflect my opinion that none of these conditions are present to justify the new rules given to ARPC by Grace and its experts as claims projection assumptions. Grace's asbestos bodily injury defense was managed well by tough, experienced in-house lawyers through a trial-capable national defense network. Those lawyers made and documented in considerable detail rational choices in Grace's self-interest based on state of the art information that included current and anticipated trial results and the wealth of other information this litigation has generated in closely comparable circumstances since the late 1960's. The results achieved – the prices and other terms of settlement agreed to – reflected negotiations that took into account Grace's knowledge, for example, that cases it was settling in group settlements might include significant numbers of cases that a jury might value at zero because of facts relating to inadequate/indefensible disease diagnosis, inadequate exposure, the epidemiology of cancer causation, B-reader error or outright fraud, fraudulent screening practices, product identification "coaching," or the possibility of mass or consolidated trials. These same results also took into account Grace's knowledge of the proven likelihood that even in those classes of claims Grace thought least valuable, juries had returned and still could return significant verdicts and that, given Grace's potential to become a target defendant with exposure to punitive damages, the evolving experience of significant defendants such as OC proved that Grace was better off with a peripheral defense "low profile" strategy.

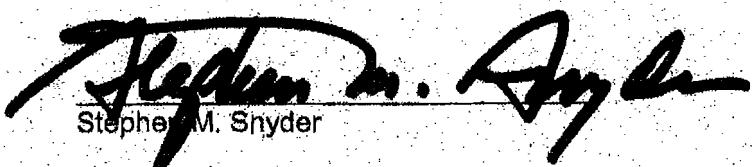
The asbestos litigation is massive and volatile. It is always changing at the margins but rarely in its fundamentals. In my opinion, the fundamentals of the asbestos litigation ultimately relate to facts that have not changed: the huge numbers of workers exposed over many decades and the mortality and morbidity this has caused and will continue to cause. Tort reform in some states, new experiments in docket management programs, popularized hostility to screenings, etc., all are changes that, without more, have not yet been proved to be capable of altering the fundamentals. National tort reform eliminating the tort system altogether for asbestos cases could have brought fundamental change. But it did not and the lesson from the

past is that the case flow ebb that perceived imminent passage of national tort reform brought about signals that, in time, there will be surges in filings in newly developed jurisdictions as the litigation regenerates itself.

Under these circumstances, as in the active litigation, the only defensible assumptions to make to inform projections of the sort ARPC customarily provides is that the future will continue the trends of the past, albeit with some modest room for adjustments -- up and down -- at the margins to account for new developments.

Dated: September 24, 2007

San Francisco, CA



The image shows a handwritten signature in black ink, appearing to read "Stephen M. Shyder". Below the signature, the name "Stephen M. Shyder" is printed in a smaller, clean font.

EXHIBITS

- A Reports Reviewed
- B Mass Trials
- C Screenings

EXHIBIT A

- Expert Report of Elizabeth Anderson, Ph.D., October 3, 2006;
- SUPPLEMENTAL REPORT: The Scientific Credibility of Personal Injury Claims Related to Alleged Exposure to W. R. Grace Asbestos-Containing Products, by Elizabeth Anderson Ph.D., June 11, 2007;
- SECOND SUPPLEMENTAL AND REBUTTAL REPORT: The Scientific Credibility of Personal Injury Claims Related to Alleged Exposure to W. R. Grace Asbestos-Containing Products, by Elizabeth Anderson Ph.D., July 31, 2007
- Expert Report of Gordon Bragg, Ph.D., October 3, 2006;
- Report of Frederick Dunbar, June 18, 2007;
- Expert Report of Paul E. Epstein, October 3, 2006;
- Estimation of the Number and Value of Pending and Future Asbestos-Related Personal Injury Claims: W. R. Grace, by B. Thomas Florence, June 18, 2007;
- Expert Report of Daniel Henry, M.D., October 3, 2006;
- Expert Report of Grover M. Hutchins, M.D., October 3, 2006;
- Expert Report of Richard J. Lee, Ph.D. for Asbestos PI Claims Estimation Proceeding, October 3, 2006;
- The Role and Process of Exposure Assessment Regarding Asbestos-Related Personal Injury Liability, by Peter S. J. Lees, October 3, 2006;
- The Role and Process of Exposure Assessment Regarding Asbestos-Related Personal Injury Liability: Supplemental Report, by Peter S. J. Lees, June 11, 2007;
- The Role and Process of Exposure Assessment Regarding Asbestos-Related Personal Injury Liability: Revisions to Supplemental Report, by Peter S. J. Lees, July 31, 2007;
- The Role and Process of Exposure Assessment Regarding Asbestos-Related Personal Injury Liability: Rebuttal to Report of Steve B. Hays, by Peter S. J. Lees, July 31, 2007

- Expert Report of Dr. Laurentius Marias and Dr. William E. Wecker, October 3, 2006;
- Expert Report of Suresh Moolgavkar, M.D., Ph.D., October 3, 2006;
- Expert Witness Disclosure of Bertram Price, April 28, 2006;
- Expert Report of Joseph V. Rodricks, Ph.D., October 3, 2006;
- Rebuttal Expert Report of Joseph V. Rodricks, Ph.D., June 8, 2007;
- Expert Report of David Weill, M. D., October 3, 2006;
- Rebuttal Expert Report of David Weill, M. D., June 11, 2007;
- Supplemental and Rebuttal Expert Report of David Weill, M. D., July 31, 2007.

EXHIBIT B

Mass Screenings

The results of several waves of screenings -- employees of asbestos manufacturing companies, federal government shipyard workers, rubber workers, railroad workers, steelworkers, sheet metal workers, refinery workers -- showed up on court dockets beginning in the 1980's. These screenings produced the full gamut of disease claims. They brought to prominence the pejoratively named "*non-impaired*" or "sub-clinical" category of non-malignant asbestos disease claims. Dealing with these "non-impaired" claims and the clinical screenings was a major challenge for the ACF defendants in 1985 to 1988.

Before the mid-1980s, defendants and courts had become accustomed to dealing with a hard core of non-malignancy claims that afflicted insulators who had spent whole careers cutting, installing and removing high temperature insulation products and with heavily exposed shipyard workers, especially those who had worked in severely dust infested, poorly ventilated spaces such as ship's holds or engine rooms. Many of the workers who filed early cases were afflicted with classic severe asbestosis and were demonstrably impaired or even severely disabled or near death. Although the manifest severity of non-malignant disease was consistently greater in the earlier waves screenings of cases than in the later cases, "mass screenings" generated many cases in both categories.

Asbestos disease claims from the non-insulator trades, e.g., working in the vicinity of but not directly with asbestos, increasingly produced claims by workers whose impairment often was milder and who presented with alleged lung disease -- pleural plaques, pleural thickening, milder scarring in the lung parenchyma -- that did not fit the classic definition of asbestosis. As with classic clinical asbestosis, though, the expert witnesses testified that these conditions emerged after long periods of latency, could impair lung function, and would persist and even progress, and sometimes even develop into malignancies, over many years. All of the medical-forensic issues related to the emergence of these claims -- brought to court both as a result of screenings or through more conventional clinical routes -- were litigated extensively across the country when these claims arrived on the scene in the 1980's.

ACF defendants confronted all the issues presented by these claims extensively in Northern California in this period. This was done in dozens of trials conducted in just Northern California alone during the brief tenure (1986-1988) of the ACF.

Mass screenings resulting in filed claims were an issue from the first days of the ACF in 1985. A California based lawyer, Gordon Stemple, arranged screenings and referred thousands of resulting cases to a network of lawyers which prosecuted and tried the cases. Health surveillance programs in federal shipyards screened workers who then filed cases. Lawyers set up union based screenings of plant workers, which generated thousands of filings in the 1980s. Various labor councils, e.g., the sheet metal workers and various construction crafts worked with lawyers to stage screenings.

Litigation driven screenings of tire plant workers were an early example of mass screenings that were viewed by the defense community as suspect – and by some as fraudulent. It ignores this reality to state, as one Grace expert does, (Henry Report at pp. 17-19) that 2004 marked a dawning of awareness of the potential for fraud – or sloppy doctoring -- in the system. The tire worker cases, and the screening that generated them, were among the new paradigm cases that contributed to stresses among the defendants, especially the ACF, over how to handle “non-traditional” claims.

In December 1990, the Fifth Circuit affirmed a mass summary judgment based dismissal of 451 tire worker cases filed in the Western District of Texas. *Slaughter v. Southern Talc Co.*, 919 F.2d 304 (5th Cir. 1990). Those cases had been in discovery for two years – the screening and resultant filings dated back to the 1987-87 time frame. Plaintiffs were members of the National Rubber Workers Union, screened by the “National Tire Workers Litigation Project”. Most defendants believed that the circumstances of the screening (mobile units, workplace questionnaires, assembly line diagnosticians and dubious non-malignant diagnoses) strongly suggested fraud.

Raymark sued the participants. *Raymark Industries, Inc. v. Stemple*, 1991 WL 100820 (D. Kan. 1991), outlines the scope of the problem: In 1987, to alleviate some of the pressures on the court caused by massive filings, Judge Kelly put in place a settlement agreement in a class action (*Wells v. Raymark*) which contemplated processing 20,000 claims against Raymark. Attorneys Gordon Stemple and Dick Gerry then filed about 6,000 tire worker cases, all diagnosed by three doctors (Gelbard, Rao and Bharadwaja). In May 1987, Raymark was given permission to audit the claims. Discrepancies turned up and were addressed, but Raymark continued to investigate. In September 1987, Raymark filed 12 class action complaints against the defendant doctors. Judge Kelly directed that the claims be filed in his court and Raymark did so, via a RICO complaint filed January 12, 1988.

Other courts handled the tire worker filings differently. In Northern Ohio, Owens Corning and 200 other defendants were still litigating 2,000 cases on the merits in December 1993. *In re N. Ohio Tireworkers*, 634 N.E.2d 249 (Ohio App. 1993).

In Oklahoma, in federal court, tire worker cases went to the jury against, among others OCF and Eagle-Picher (insulated pipes in the tire plants, etc.)¹⁰⁹.

Tire worker cases were allowed to proceed past summary judgment by Judge Weiner in the E.D. Pa. in September 1991 –in part on the basis of “fiber drift” testimony (although the court found no possibility of fiber drift on the facts particular to certain cases) with respect to “drift” of fiber from Bendix brakes. *In re Tire Workers Asbestos Litigation*, 1991 WL 195557 (E. D. Pa. 1991).

The initial controversy surrounding the tire worker filings led to varying results. Dismissals on a mass basis were entered. Cases were dismissed wholesale by some plaintiffs' counsel as the defendants concentrated their attack on the screenings. Other plaintiff counsel simply developed new and different medical support for the claims – evidence not tainted by the screenings of the “suspect” screening doctors.

Screenings done in the early 1980s generated subsequent litigation on limitations issues.¹¹⁰ A “non-impaired” worker notified of asbestos lung changes in the early 1980s had a choice – sue, face arguments that there were no damages and run the risk that a judgment would bar a later claims for cancer or disabling disease or do nothing and face a statute of limitations risk. Before pleural registries or “green card” programs, this conundrum forced early non-impaired filings, although the Hobbesian choice was eliminated over time by adoption of special limitations or “two

¹⁰⁹ Three juries heard common openings and then heard separate evidence. All three found for plaintiffs, awarding verdicts of \$350,000; \$1.2 million and \$200,000 – reduced by remittitur and settlement offsets. Limits on witnesses, etc. were affirmed as the court had almost 600 cases on its docket, in light of that “enormous” case load, the limits were appropriate. One verdict was affirmed, two were reversed for want of product identification. *Blair v. Eagle-Picher Industries, Inc.*, 962 F.2d 1492 (10th Cir. 1992).

¹¹⁰ For example, *Anderson v. A.C. & S., Inc.*, 797 N.E.2d 537 (Ohio App. 2003), was a mesothelioma death case, complicated by the fact that a union screening in 1983 had generated a diagnosis of asbestosis, a suit in 1984 and a settlement in 1986 with the railroad employer. The issue on appeal was the impact of the release under the FELA, resolved there in favor of allowing the mesothelioma case to proceed. The court noted the statute of limitations and “single judgment” dilemma faced by screened workers who were alerted to non-disabling disease (797 N.E.2d at 545). See also *Wyatt v. A-Best, Co., Inc.*, 910 S.W.2d 851 (Tenn. 1995) (1988 union screenings involving Angelos law firm); *Brennan v. Owens-Corning Fiberglas Corp.*, 10 P.3d 749 (Idaho 2000)(1991 sheet metal screenings).

disease" rules. Those rule changes in turn allowed claims to slack up without being filed until health conditions became manifest.

In 1996, OC sought to reignite an earlier ACF program attacking screenings. In June of 1996 and January of 1997, Owens Corning filed RICO and fraud actions against screening companies, Pulmonary Advisory Services, Inc., Pulmonary Services of Louisiana, Inc., Pulmonary Testing Services, Inc. and Pulmonary Function Laboratory, Inc. (*Owens Corning v. Pitts*, No. 96-2095 (E.D. La. 1996); *Owens Corning v. McNeese*, 3:97cv29WS (S.D. Miss. 1997). In its Annual Report for the year ending December 31, 1996, Owens Corning noted that: "Many of the recent claims appear to be the product of mass screening programs and not to involve malignancies or other significant asbestos related impairment. The Company believes that at least 40,000 of the recent claims involve plaintiffs whose pulmonary function tests (PFTs) were improperly administered or manipulated by the testing laboratory or otherwise inconsistent with proper medical practice, and it is investigating a number of testing organizations and their methods. In 1996 the Company filed suit in federal court against the owners and operators of certain pulmonary function testing laboratories in the southeastern U.S. challenging such improper testing practices." (Owens Corning 10-K for the year ending December 31, 1996.)

Judge Jack's opinion in *In re Silica Products Liability Litigation*, 398 F. Supp.2d 563 (S.D. Tex. 2005), involved outreach to sheet metal workers – a screening program that had been operating – and generating claims – for more than 20 years.

The foregoing illustrates how for over three decades -- beginning in the mid-1980s, well before the surges described by the reports of the experts for Grace in the mid to late 1990's--courts and the litigants have been dealing with issues presented by screenings and non-asbestosis non-malignancy claims, and the claiming "surges" they created.

EXHIBIT C

Mass and Group Trials

Group trials of asbestos cases were a prominent feature of the asbestos litigation long before the late 1990's settlement pressure cooker described in the Grace expert reports and in portions of Mr. Hughes' deposition testimony. The information presented below elaborates on my view that mass or group trials were not innovations of biased state court judges presiding over anti-defense litigation "hell holes".

Consolidation of asbestos cases for trial dates to very early in the litigation. In *Neal v. Carey Canadian Mines, Inc.*, 548 F. Supp. 357 (E. D. Pa. 1982) aff'd 760 F.2d 481 (3d Cir. 1985), Judge Bechtle denied JNOV and new trial motions made by plaintiffs and defendants following the first multi-plaintiff trial in the district, involving 15 of 24 claims consolidated for trial against multiple defendants. Trial lasted 29 trial days. Id at 365-66. Argument was limited to 30 to 45 minutes. Id. at 385.

The Fifth Circuit affirmed a liability determination class action vehicle in *Jenkins v. Raymark Industries, Inc.*, 782 F.2d 468 (5th Cir. 1986). *Jenkins* sanctioned a template by which courts could determine liability "across the board."

Five consolidated cases were tried in the federal court in New York in 1989. *In re Joint Eastern and Southern Districts Asbestos Litigation*, 125 F.R.D. 60 (E.D.N.Y. 1989). Nine cases (four plaintiffs deceased with mesothelioma and lung cancer and five living plaintiffs against more than 20 defendants) were consolidated for trial in 1990. *In re Joint Eastern & Southern Dist. Asbestos Litigation*, 1990 WL 4772 (S.D.N.Y. Jan. 16, 1990) (Sweet, D.J.).

On January 22, 1990, several hundred personal injury and death cases with a nexus to the Brooklyn Navy Yard were assigned to District Judge Jack Weinstein for all purposes. *In re Joint Eastern & Southern Districts Asbestos Litigation*, 772 F. Supp. 1380 (E. & S.D.N.Y. 1991) ("Brooklyn Navy Yard I"), aff'd in part and reversed in part *In re Brooklyn Navy Yard Asbestos Litigation*, 971 F.2d 831 (2d Cir. 1992) ("Brooklyn Navy Yard II"). In the Brooklyn Navy Yard cases, 600 cases were consolidated for trial in groups keyed to the approximate amount of exposure claimed at the Brooklyn Navy Yard. Most cases settled, but 79 cases went to trial before Judge Weinstein and a jury, which returned plaintiff verdicts in 52 cases and defense verdicts in 12 cases (the others in that trial group settled). Later, 15 remaining cases went to trial before the same Judge and jury. See *In re New York Asbestos Litigation*, 145 F.R.D. 644, 652-53 (S.D.N.Y. 1993). As the Second Circuit noted, trials were handled with the utmost care to insure the jurors assimilated the vast amount of information presented. *Brooklyn Navy Yard II*, 971 F.2d at 836 (2d Cir. 1992).

Although an appeal followed, even the defendants did not contest the propriety or conduct of the joint trial. *Id.* at 836 n.1.

On February 27, 1991, Judge Sifton ordered the consolidation of all cases pending in the Southern and Eastern Districts of New York which arose out of construction, maintenance or operation of electrical facilities in New York (the "Powerhouse Cases"). The cases were consolidated for trial – then bifurcated to try damages first, then liability. In August 1991 the first jury trial yielded a verdict of over \$42 million for the first damages trial in 45 cases. Settlement negotiations accelerated and ultimately only two Powerhouse Cases were tried.¹¹¹ See generally, 145 F.R.D. at 650.

In early 1991, the Rehnquist Committee Report called on Congress to impose a national solution. In July 1991, the Judicial Panel on Multidistrict Litigation observed that, "[t]he heyday of individual adjudication of asbestos mass tort lawsuits has long passed."

But, in response to the Rehnquist Report, there was no federal legislative solution – national or otherwise. And, the federal appellate courts continued to reject or narrowly constrain class action resolution mechanisms for the asbestos problem. The federal courts were left to grapple with the docket and repetitive trial problems highlighted by the Rehnquist Committee. And, state courts inherited an increased load of asbestos cases in the wake of the MDL transfer. Those courts faced the same problems and sought solutions just as the federal courts had done.¹¹²

In 1993, following guidance from the Second Circuit in the Powerhouse Cases, Judge Sweet reconsidered and affirmed a prior order consolidating six cases against twelve then remaining defendants. *In re New York Asbestos Litigation*, 149 F.R.D. 490 (S.D.N.Y. 1993).

Other illustrative examples of mass or consolidated trial experimentation include the following:

¹¹¹ This consolidation was reversed by the Second Circuit by split decision in *Malcolm v. National Gypsum Co.*, 995 F.2d 346 (2d Cir. 1993). The panel observed that it was not condemning consolidations – having approved one by Judge Weinstein the year before – but noted it was possible to go too far and found the line had been crossed with the widely disparate worksites there involved.

¹¹² "Congress, by not creating any legislative solution to these problems, has effectively forced the courts to adopt diverse, innovative and often non-traditional judicial management techniques to reduce the burden of asbestos litigation that seem to be paralyzing their active dockets." *State ex rel. Appalachian Power Co. v. MacQueen*, 479 S.E.2d 300, 303-304 (W.Va. 1996).

- *Cimino*. In 1989 and 1990, a trial to establish liability and to resolve several individual cases was conducted before Judge Parker and a jury. Then 160 cases were tried to two juries before Judges Parker and Schnell in groups comprised of claimants with similar disease claims -- mesothelioma, lung cancer asbestosis, "other cancers", etc. Judge Parker then conducted a hearing and by statistical extrapolation derived judgments in all 2,000 plus cases subject to the trial plan. These extrapolated judgments were eventually reversed by the Fifth Circuit in 1998. *Cimino v. Raymark Industries, Inc.*, 151 F.3d 297 (5th Cir. 1998).
- *Chatham* – a Houston state court consolidation of numerous cases tried beginning in late 1990. (*Chatham* ended in fiasco (and reversal) on appeal when it was discovered that the trial court clerk had misplaced the entire trial record.)
- By the mid 1990s, consolidated trial of cases, organized by type of disease and by the law firm filing the cases, had become common in San Francisco, where cases were processed and tried in groups or clusters.
- West Virginia "Mass" trials. Beginning with the 1996 trial plan devised by Judge McQueen, trials were conducted in Monongalia and Kanawha counties, with the last common issues trial conducted in 1998. Four "common issues" trials in Kanawha County and two in Monongalia County eventually led to the settlement of an estimated 20,000 cases. See *State ex rel. Allman v. MacQueen*, 551 S.E.2d 369, 371 (W.Va. 2001)(ordering supplementation of trial plan for an estimated 8,000 claims then pending).¹¹³

¹¹³The Supreme Court of Appeals of West Virginia had approved a "mass" trial plan to try the question whether premises owners were liable -- whether they had maintained unsafe premises and, if so, during what years. *State ex rel. Appalachian Power Co. v. MacQueen*, 479 S.E.2d 300, 305 (W. Va. 1996). The court stressed that trial courts should have "broad authority to manage its docket with regard to asbestos cases". And as to mass trials of liability issues such as that under review, stated that "while possibly atypical in the traditional litigation process, is indispensable in handling mass litigation cases, such as damage claims for asbestos exposure." Id at 305.

The conduct of mass trials came before the court again in late 2005. *In re Tobacco Litigation*, 624 S.E.2d 738 (W. Va. 2005), approved mass trial of liability issues, including use of a punitive damages "multiplier" to be applied when and as actual damages were determined by subsequent juries. A concurring opinion explains the development of mass trials in West Virginia, beginning with Rule 1 of the Rules of Civil Procedure which, as do the FRCP, commands doing "what is necessary to obtain the just, speedy, and inexpensive determination of every action". In West Virginia, asbestos cases were first tried one at a time, but the courts "quickly abandoned that route; trying each case individually would

- In Texas, the reviewing courts affirmed groupings of cases for trial. E.g., *Owens-Corning Fiberglas Corporation v. Martin*, 942 S.W.2d 712 (Tex. 1997) (12 workers against a single manufacturer); *In re Ethyl Corporation*, 975 S.W.2d 606 (Tex. 1998) (22 claimants with remaining claims against a variety of premises owners). In *In re Ethyl Corp.*, 975 S.W.2d 606 (Tex. 1998), a single suit was brought by 459 workers, and the trial court determined to group the cases for trial using the type of claim -- premises liability -- when plaintiffs and defendants could not agree on how to constitute the trial groupings.
- In Louisiana, 2995 individual cases arising out of the Avondale shipyard were consolidated. Trials were conducted in "flights" of approximately 10 cases. Flights one and two were tried in January and June, 1994, with verdicts for and against plaintiffs. Verdicts were affirmed or reversed in a very individualized review of the evidence on appeal. *In re Asbestos v. Bordelon, Inc.*, 726 So.2d 926 (La. App. 4th 1998). Another Louisiana mass proceeding arose out of the Bogalusa paper mill. Originally filed as a class action in 1993, it was amended to a consolidated case involving more than 1,000 employees of the mill. After five years of discovery, the first "flight" of five cases tried to a jury resulted in defense verdicts. The trial court granted a new trial on damages. The reviewing court reversed, holding it was error to grant a new trial given the jury findings of no "asbestos related injury" and no "real and credible fear of cancer." *Bickham v. Metropolitan Life Ins. Co.*, 764 So.2d 345 (La. App. 1st 2000). Consolidated trial came before the

have required hundreds of years". Id. at 745. The court explained that the evidence in the trials on liability was always the same, extending over weeks in every trial. "The only issues that changed concerned the plaintiffs, namely the existence and degree of each plaintiff's injury and damages, which defendants' products caused the injury, and the relative fault of each defendant for the plaintiff's damages." Id. at 745. When West Virginia trial courts were given considerable leeway to craft trial procedures, judges began to bifurcate trials into two proceedings, a phase in which questions of law and fact common to the defendants were determined and later phases in which "The plaintiffs' cases would be broken down -- into groups by which the plaintiff's asbestos-related disease or by the plaintiff's work place, or even individually -- and juries would hear evidence unique to each plaintiff."

The West Virginia experience is typical of what unfolded in the asbestos litigation: massive docket pressures led to judicial creativity and innovation, aggregate trials were utilized to determine liability as a common issue, but trials ultimately focused on individual issues in specific cases, with evidence presented in small group trials or individually.

appellate courts in Louisiana again in *Abadie v. Metropolitan Life Ins. Co.*, 784 So.2d 46 (La.App. 5th 2001). In December 1994, the trial judge established a trial plan resulting in trial of the claims of 129 Avondale employees, with verdicts for plaintiffs in 118 cases and defense verdicts in 11 cases. Most defendants were found liable, but several were exonerated. Jury awards ranged from \$800 to \$70,000 in the non-malignancy cases. Id. at 98. The trial court had increased certain of the jury awards, finding them to have been inadequate. After conducting a particularized review of the evidence on the individual claims, and after surveying the range of verdicts in similar cases across the country, the appellate court reinstated those (lower) verdicts.¹¹⁴

¹¹⁴ The appellate court's discussion of valuation of non-malignancy claims provides the following interesting insights:

"In this case, the jury awards ranged from \$800.00 to over \$70,000.00 for those workers who did not contract cancer. We found only three reported cases in Louisiana that address quantum awards to plaintiffs who suffered non-cancer asbestos injuries . . . All cases deal with multiple plaintiffs. In Atkinson the damage award range varied from \$20,000.00 to \$40,000.00. In Bordelon, the quantum range varied from \$100,000.00 to \$375,000.00, and in Lilley, the plaintiffs were awarded compensatory damages for fear of cancer ranging from \$15,000.00 to \$30,000.00.

The Jury Verdict Research Series provides some assistance in evaluating the reasonableness of this jury's quantum award by allowing us to compare their awards with jury verdict results from around the nation. The publication states that the verdict range for asbestosis is \$5,000.00-\$15,600,000.00. A case similar to the case at bar, *Srite v. Owens-Illinois*, 870 S.W.2d 556 (Tex.App.Hous. (1 Dist.) 1993), involved nine plaintiffs who received no money for past damages, and future damages ranging from \$20,000.00 to \$65,000.00

In asbestos litigation, there is a significant variance in the assessment of damages by juries, and similarly situated asbestos victims may receive payments that vary by a factor of ten or more. In New Jersey, a verdict for pleural plaques will be in the \$0-\$15,000.00 range, while in nearby Pennsylvania, before a substantially similar jury, the same case could easily receive a \$250,000.00 verdict. In some jurisdictions, for every five claims brought, one or two will result in defense verdicts, one or two will be a plaintiff's verdict in the range of \$10,000.00-\$25,000.00, and the fifth will receive a jury verdict of \$100,000.00-\$1,000,000.00. The facts making up those claims are often identical; same claimed exposure, same age, same x-ray readings, and the same doctors testifying to the same sets of medical facts; however, the jury verdicts differ.

Each quantum award must be evaluated based on the facts of each individual case. Given the conflicting medical evidence presented to the jury in this case,

The Maryland mass consolidations (termed by defense lawyers the "Mother of All Consolidations" in those First Gulf War days) provide a good example of the strengths, weaknesses and limitations of consolidated trials. Following Judge Parker's *Cimino*¹¹⁵ trial, 8,555 cases pending in Baltimore City and other Maryland counties were consolidated for trial in 1990. In September 1987, there were approximately 1,000 cases pending in Baltimore City; the number there grew to more than 4,900 by April 1990. Trial plans based on small group consolidations proved unworkable as annual new filings were ten times the number of cases that could be disposed of by small group consolidated trials in the same period. Thus, in April 1990 Judge Marshall Levin determined to consolidate the cases along the lines of the Cimino trial plan – using six representative plaintiffs (whose cases would be tried on all issues) and evidence intended to determine common liability questions in all the cases. Judge Levin's plan contemplated later "mini" trials on damages against those defendants determined to be liable. See ACandS, Inc. v. Godwin, 667 A.2d 116 (Md. 1995).

The consolidation referred to as *Abate* went through protracted pretrial and jury selection procedures in early to mid 1991, was mistried, and went to trial a year later from February 18 to August 10, 1992 before Judge Levin. Some 100 defendants had been sued. Plaintiffs dismissed all but 15. Nine of those defendants, including Grace and my client, Fibreboard, settled during the trial. Six defendants went to verdict – and won three of the six cases tried on all issues. The Court of Appeals of Maryland affirmed the consolidation, affirmed five of the six judgments entered and reversed the punitive damages awards (based on a multiplier) against several defendants including Pittsburgh Corning. That court rejected due process constitutional challenges to the consolidation, with a thorough review of the asbestos trial consolidation jurisprudence then available. ACandS, Inc. v. Godwin, 667 A.2d 116 (Md. 1995).

The celebrated Baltimore consolidated trial – supposedly involving 8,555 consolidated cases – in 1992 thus resolved only six cases – three for the plaintiffs (one reversed on appeal) and three for the defendants, and established the generic liability of six (out of over 100) defendants in the remaining 8,500 plus cases.

The Maryland courts renewed consolidated trials in a case known as *Abate II*, tried on common issues against additional defendants in about 1300 cases, and involving, again, both illustrative plaintiffs whose cases were fully tried and resolution of "common" liability issues as to the defendants involved there. Trial took place from

we cannot say that the jury quantum awards in this case were unreasonable."
Abadie v. Metropolitan Life Ins. Co., 784 So.2d 46, 98-99 (La.App. 5th 2001).

¹¹⁵ See *Cimino v. Raymark Industries, Inc.*, 151 F.3d 297 (5th Cir. 1998), for the ultimate appellate treatment of the Cimino trial plan.

late June 1994 through early December of that year. That procedure, too, was affirmed, with particularized treatment of the five "trial plaintiffs" whose claims were fully tried to judgment. This procedure was affirmed, *AcandS v. Abate*, 710 A.2d 944 (Ct. Spec. App. Md. 1998), with particularized appellate treatment of the claims by each trial plaintiff against each defendant.

The Maryland consolidated trials were seen as controversial by defendants. Baltimore City was viewed as an early 1990s version of one of the "hell holes" depicted by the Grace experts. But, at the end of the day, two major consolidations involving almost 10,000 plaintiffs spanning four years, and encompassing many months of trial generated just 11 judgments (three of which were in favor of defendants) and determinations of generic liability as against a handful of defendants who elected to go to verdict – with an endless series of almost 10,000 "mini trials" required to reduce the claims of the plaintiffs to judgments. Each of those "mini trials" (if they were ever to occur) would require jury resolution of particularized fact issues such as whether each plaintiff subject to the consolidation had an asbestos injury, whether the conduct or products of a particular non-settling defendant were a legal cause of any injury, etc.

In the end the Maryland trials actually eliminated punitive damages against some of the front line defendants, established liability against many, but resulted in few judgments, leaving final adjudication in most cases to later, particularized trials on injury, causation and damages. By the time Maryland had played out its mass trial scenario, most of the litigants had become jaded and were skeptical whether the mass trial threat was real or imaginary.

As explained in some detail above, "mass" trials generally resolved only generic "liability" questions, with the result that individual cases were decided not en masse but in traditional small group trials. The only deviation from this model of which I am aware occurred in the Cimino trials conducted by Judge Parker in Eastern Texas in which the results of 160 cases tried to two juries in a series of small group trials were "extrapolated" using statistical means to the entire class of plaintiffs before that court. This procedure was reversed by the Fifth Circuit.¹¹⁶ Overwhelmingly, "mass" trials were ultimately a series of small group trials in which the juries did discriminate among claimants-- and which were reviewed with some care by the appellate courts. Grace had the benefit of reviewing those jury verdicts and the appellate treatment of them.

¹¹⁶ *Cimino v. Raymark Industries, Inc.*, 151 F.3d 297 (5th Cir. 1998).